MSP/EMHSD Pub. 101
June 2022
Emergency Management and Homeland Security Division
Michigan Department of State Police

MICHIGAN EMERGENCY MANAGEMENT PLAN

Michigan Emergency Management Plan (MEMP)

EXECUTIVE SYNOPSIS

One of the most important functions of Michigan government is the protection of life, property, and the environment. To meet threats and hazards to these basic needs the state of Michigan (SOM) requires a coordinated response to emergencies and disasters. The Michigan Emergency Management Plan (MEMP) is a comprehensive, all-hazards plan which identifies the processes, policies, priorities, and responsibilities of state agencies, stakeholders, and partners in directing coordinated action in all phases of the emergency management cycle.

RECORD OF CHANGES

The MEMP was evaluated in 2018 as part of its continuing maintenance. Its primary format, based around Michigan-specific Emergency Support Functions (ESFs), was targeted for improvement to align with federal ESFs. This required reformatting from eight Michigan-specific ESFs to fifteen ESFs in alignment with federal agencies. Beginning in late 2018 and continuing through 2022, the MEMP was revised to reflect the federal ESFs as used by the Federal Emergency Management Agency (FEMA). The MEMP was also edited for clarity with whole community involvement. Agencies involved in this rewriting included:

American Red Cross	ARC
Bureau of Fire Services	BFS
Michigan Department of Natural Resources	MDNR
Department of Technology, Management, and Budget	DTMB
Environment, Great Lakes, and Energy	EGLE
Labor and Economic Opportunity	LEO
Licensing and Regulatory Affairs	LARA
Michigan Community Service Commission	MCSC
Michigan Department of Agriculture and Rural Development	MDARD
Michigan Department of Civil Rights	MDCR
Michigan Department of Corrections	MDOC
Michigan Department of Education	MDE
Michigan Department of Health and Human Services – Health	MDHHS - Health
Michigan Department of Health and Human Services – Human Services	MDHHS - Human Services
Michigan Department of Transportation	MDOT
Michigan National Guard	MING
Michigan Department of Military and Veteran Affairs	MDMVA
Michigan Public Service Commission	MPSC
Michigan State Police	MSP
Michigan State Police, Emergency Management and Homeland Security Division	MSP/EMHSD
Michigan Voluntary Organization's Active in Disaster	MI VOAD
Michigan Economic Development Corporation	MEDC

NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)

#NIMS: The National Incident Management System (NIMS) is a whole community system, which guides all levels of government, non-profit organizations, and the private sector to accomplish all emergency management mission areas. Stakeholders are provided with shared terms, systems, and processes to successfully deliver the capabilities described in the National Preparedness System. The NIMS uses the Incident Command System (ICS) and is an integral piece of the National Response Framework (NRF) which is used to outline the organizational preprocess of the whole community to utilize the National Preparedness System to achieve the National Preparedness Goal. The 2022 update of the MEMP uses the following 14 NIMS management characteristics:

- **Common Terminology**: The MEMP uses acronyms only after having identified the full term, and utilizes common terms established under the NIMS to enable diverse incident management and support organizations to work together across a wide variety of functions and hazard scenarios.
- **Modular Organization**: Incidents are handled locally, unless the incident is too large and/or beyond the capabilities of the locals, in which case the State of Michigan responds. If an incident is beyond the response

capabilities of the State of Michigan, the State may request the federal government for assistance. (See "Obtaining Federal Assistance".)

- **Management by Objectives**: In each incident overarching objectives, strategies, and tactics are developed to fulfill the central goal of the State of Michigan to protect and preserve life, property, the environment, and to facilitate scene stabilization and incident recovery.
- **Incident Action Planning (IAP)**: In each incident requiring full State of Michigan State Emergency Operations Center (SEOC) activation, an Incident Action Plan (IAP) is created to delineate objectives and strategies to accomplish those identified objectives. (See "SEOC Operations".)
- **Incident Locations and Facilities**: Local jurisdictions responding to an incident generally are the coordinators of the Incident Command Post (ICP), Base, Camp, and Staging Areas; however, in some incidents the SEOC may become involved in the management of these incident locations and facilities. (See "Logistics Support and Resource Requirements for Plan Implementation", "ESF 7", and the *Disaster Logistics Management Plan*.).
- **Comprehensive Resource Management**: Resources (personnel, teams, equipment, supplies, and facilities) utilized in a disaster are managed primarily through ESF 7: Logistics Management.
- **Integrated Communications**: Interoperable and comprehensive communications are coordinated through ESF 2: Communications, ESF 5: Information and Planning, and ESF 15: External Affairs.
- **Establishment and Transfer of Command**: A clear transfer of command is often signaled through the de-escalation of the SEOC activation levels and decrease of SEOC activities and footprint following the response of the State of Michigan in an incident; thereby signaling that the State of Michigan is transferring command of the incident back solely to the local jurisdiction. (As disasters begin and end locally and are driven by local needs, the State's involvement is always to support and supplement local response and recovery needs).
- **Chain of Command and Unity of Command**: See "Line of Succession for Governor".
- **Unified Command**: See "SEOC Operations".
- **Accountability**: Accountability can be tracked through multiple methods during an incident, including the use of the web-based Michigan Critical Incident Management System (MI CIMS), which merges check-in requirements, Incident Action Planning, Unity of Command, and Resource Tracking.
- **Dispatch/Deployment**: Resources for response are deployed intentionally through the SEOC or using MI CIMS and Memorandums of Understanding (MOUs). Self-deployment is highly discouraged.
- **Information and Intelligence Management**: The SEOC Planning section in conjunction with the District Coordinators (DCs), MI CIMS, Voluntary Organizations Active in Disaster (VOADs), and local Emergency Management Coordinators (EMCs) coordinate to gather information and verify intelligence. (See "SEOC Operations".)
- **Manageable Span of Control**: See "SEOC Operations".

The MEMP also uses the NRF's fourth edition (2019), which expanded upon previous edition's programs and systems. New NRF concepts included Community Lifelines (Lifelines), which are used to enable the continuous operation of critical government and business functions (see "Lifelines"). The reformatting and updating of the MEMP (2021) integrates this Lifelines concept with the 15 federal ESFs. The fourth edition NRF also includes the addition of ESF 14: Cross-Sector Business and Infrastructure, which replaced the previous ESF 14: "Long-Term Community Recovery" in the third edition of the NRF. The Cross-Sector Business and Infrastructure ESF was built from the FEMA Critical Infrastructure and Key Resources Support Annex and Private Sector Coordination Support Annex. Due to the new creation of the Michigan Public Private Partnership (P3) Program in late 2019, and the new framework established by ESF 14, the 2021 MEMP does not include the ESF 14 update, however a placeholder for this ESF has been added to this document for the following update to include the new ESF 14 integrated in with the P3 Program. The MEMP has adopted the Lifeline concepts while remaining compliant with NIMS guidance identified in the third and fourth editions of the NRF: engaged partnerships (see "Record of Changes"); tiered response (see "SEOC Activation Levels"); scalable, flexible, and adaptable operational capabilities (See "Emergency Management System Description"); unity of effort through unified command (See "SEOC Operations"); and readiness to act (See "SEOC Activation Levels").

Overall, the MEMP is structured to layer the different systems used in the National Preparedness Goal, including the NRF, NIMS, ICS, and Core Capabilities. Each ESF annex is broken down by partner involvement, which is then broken down by mission area (prevent, protect, mitigation, respond, recover). These ESF annexes provide the framework for the delivery of actions (tasks) which address the needs of Lifelines requiring stabilization.

EMAP TABLE OF CONTENTS

To meet the Emergency Management Accreditation Program (EMAP) standards, the MEMP was updated with the EMAP standards in mind. The table below describes the EMAP standards which apply to this plan and the pages where these standards can be found within this plan. Compliance with EMAP standards assists in ensuring the MEMP is compliant with the NIMS and follows Comprehensive Planning Guidance 101 (CPG 101). This plan was reviewed for EMAP compliance in 2021.

2019 Standard	Description	Pages
4.4.1 (1)	The Emergency Management Program, through formal planning processes involving stakeholders and by addressing all hazards identified in Standard 4.1.1, has developed the Emergency Operations Plan	
4.4.1 (2)	The Emergency Management Program, through formal planning processes involving stakeholders and by addressing all hazards identified in Standard 4.1.1, has developed the Recovery Plan	
4.4.1 (3)	The Emergency Management Program, through formal planning processes involving stakeholders and by addressing all hazards identified in Standard 4.1.1, has developed the Continuity of Operations Plan	
4.4.1 (4)	The Emergency Management Program, through formal planning processes involving stakeholders and by addressing all hazards identified in Standard 4.1.1, has developed the Continuity of Government Plan	
4.4.2 (1a)	The Emergency Operations Plan (EOP) for the departments, agencies and organizations with essential program functions address the purpose and scope or goals and objectives	
4.4.2 (2a)	The Emergency Operations Plan (EOP) for the departments, agencies and organizations with essential program functions address the authorities	
4.4.2 (3a)	The Emergency Operations Plan (EOP) for the departments, agencies and organizations with essential program functions address situation and assumptions	
4.4.2 (4a)	The Emergency Operations Plan (EOP) for the departments, agencies and organizations with essential program functions address the functional roles and responsibilities for internal and external agencies, organizations, departments, and positions	
4.4.2 (5a)	The Emergency Operations Plan (EOP) for the departments, agencies and organizations with essential program functions address logistics support and resource requirements necessary to implement the Plan	
4.4.2 (6a)	The Emergency Operations Plan (EOP) for the departments, agencies and organizations with essential program functions address the concept of operations	
4.4.2 (7a)	The Emergency Operations Plan (EOP) agencies and organizations with essential program functions include a maintenance process, which includes a method and schedule for evaluation and revision	
4.4.2 (1b)	The Recovery Plan for the departments, agencies and organizations with essential program functions address the purpose and scope or goals and objectives	
4.4.2 (2b)	The Recovery Plan for the departments, agencies and organizations with essential program functions address the authorities	
4.4.2 (3b)	The Recovery Plan for the departments, agencies and organizations with essential program functions address situation and assumptions	
4.4.2 (4b)	The Recovery Plan for the departments, agencies and organizations with essential program functions address the functional roles and responsibilities for internal and external agencies, organizations, departments, and positions	
4.4.2 (5b)	The Recovery Plan for the departments, agencies and organizations with essential program functions address logistics support and resource requirements necessary to implement the Plan	
4.4.2 (6b)	The Recovery Plan for the departments, agencies and organizations with essential program functions address the concept of operations	
4.4.2 (7b)	The Recovery Plan for the departments, agencies and organizations with essential program functions include a maintenance process, which includes a method and schedule for evaluation and revision	

2019 Standard	Description	Pages
4.4.3 (1)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include administration and finance	
4.4.3 (2)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include agriculture and natural resources	
4.4.3 (3)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include alert and notification	
4.4.3 (4)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include communications	
4.4.3 (5)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include critical infrastructure and key resource restoration	
4.4.3 (6)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include damage assessment	
4.4.3 (7)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include debris management	
4.4.3 (8)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include detection and monitoring	
4.4.3 (9)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include direction, control, and coordination	
4.4.3 (10)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include donations management	
4.4.3 (11)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include emergency public services	
4.4.3 (12)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include energy and utilities services	
4.4.3 (13)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include evacuation and shelter-in-place	
4.4.3 (14)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include fatality management and mortuary services	
4.4.3 (15)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an	

2019 Standard	Description	Pages
	emergency/disaster. Areas of responsibility to be addressed include firefighting/fire protection	
4.4.3 (16)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include food, water, and commodities distribution	
4.4.3 (17)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include hazardous materials	
4.4.3 (18)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include information collection, analysis, and dissemination	
4.4.3 (19)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include law enforcement	
4.4.3 (20)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include mass care and sheltering	
4.4.3 (21)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include mutual aid	
4.4.3 (22)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include private sector coordination	
4.4.3 (23)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include public health and medical services	
4.4.3 (24)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include public works and engineering	
4.4.3 (25)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include resource management and logistics	
4.4.3 (26)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include search and rescue	
4.4.3 (27)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include transportation systems and resources	
4.4.3 (28)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include volunteer management	
4.4.3 (29)	The Emergency Operations Plan (EOP) identifies and assigns specific areas of responsibility for performing functions in response to an emergency/disaster. Areas of responsibility to be addressed include warning	

2019 Standard	Description	Pages
4.4.4 (1)	The Recovery Plan establishes short and long-term recovery priorities. The Plan identifies and assigns critical functions	
4.4.4 (2)	The Recovery Plan establishes short and long-term recovery priorities. The Plan identifies and assigns services/programs	
4.4.4 (3)	The Recovery Plan establishes short and long-term recovery priorities. The Plan identifies and assigns vital resources	
4.4.4 (4)	The Recovery Plan establishes short and long-term recovery priorities. The Plan identifies and assigns facilities	
4.4.4 (5)	The Recovery Plan establishes short and long-term recovery priorities. The Plan identifies and assigns infrastructure	
4.4.7	The Emergency Management Program has procedures to implement all Plans identified in Standard 4.4.1. The implementation procedures are applicable to all hazards identified in Standard 4.1.1.	
4.4.8	The Emergency Management Program has procedures to guide situational analysis, damage assessment, situation reporting, and incident action planning.	
4.4.9	The Emergency Management Program has a maintenance process for the procedures identified in Standards 4.4.7 and 4.4.8, which includes a method and schedule for evaluation and revision.	

HOW TO USE THIS DOCUMENT

Summary of MEMP Layout

The MEMP is an all-hazards incident management plan for the State of Michigan (SOM) to respond to and recover from all incidents. This document is broken into four primary sections: the basic plan, Emergency Support Function (ESF)-specific annexes, disaster-specific annexes, and additional support appendices. The **basic plan** contains core information as to the document's scope, key assumptions, and primary authorities. It also includes introductory information regarding programmatic training, exercises, finance and administration, the State Emergency Operations Center (SEOC), and the Community Lifeline system. Each **ESF-specific annex** reviews the purpose, scope, and core capabilities associated with that ESF. The ESF-specific annex also reviews the tasks of each agency organized by state agency, then mission area. The **disaster-specific annexes** review the additional tasks and responsibilities, or deviations of operations, of various state agencies as related to specific disasters. Finally, the additional **support appendices** include various documents and tools that give context to this document or to the processes contained herein.

How Local Emergency Managers use the MEMP

Local partners and stakeholders using this document can review the basic plan for a general overview of how Michigan's Emergency Management System is used in the SEOC and in daily operations. The basic plan also introduces the concept of the Threat and Hazard Identification and Risk Assessment (THIRA), "…a three-step risk assessment process that helps communities understand their risks and what they need to do address those risks", and which FEMA uses to gauge the effectiveness of delivering core capabilities. This plan also discusses Community Lifelines, which is a FEMA concept used to measure the stability of an incident.

How State Agencies, Departments, or Partners use the MEMP

State level agencies, departments, stakeholders, and partners can use the ESF-specific annexes to review tasks which their agency may be assigned in each ESF and under each disaster or emergency phase (mission area). Further the disaster-specific annexes identify additional tasks for state agencies, departments, stakeholders, and partners that are linked to a specific type of disaster.

Keyword Index

The Index below indicates the keyword to search for to find a specific concept in this plan. For example, to find information on THIRA, the keyword #THIRA would be searched.

Description	Keywords
National Incident Management System principles; related to Incident Command System, federal requirements, and the state of Michigan implementation of NIMS	#NIMS
Michigan Hazard Analysis; Publication 103: of or related to this plan	#MHA
Michigan Hazard Mitigation Plan; Publication 103: of or related to this plan	#MHMP
Populations with Access and Functional Needs; specific needs as related to these populations, general demographic information	#AFN

Emergency Management Assistance Compact; of or related to this compact, its implementation or uses	#EMAC
Threat Hazard Identification and Risk Analysis (often paired with the Stakeholder Preparedness Review-SPR): related to the assessment of delivery of core capabilities in Michigan following the FEMA process.	#THIRA
Core Capabilities; the individual capabilities which must be delivered via emergency support functions (ESFs) to ensure a successful incident response and recovery	#CC
Incident Command System; related to the NIMS as implemented by the State of Michigan following FEMA's requirements	#ICS
Of or related to the declaration of a state of emergency or disaster by the Governor; state resources available with a disaster or emergency declaration	#SOM
Of or relating to Section 18 or 19 Funding	#S.18.19
Of or related to the declaration of a state of emergency or disaster by the President; federal resources available with a disaster or emergency declaration	#FED
What a local emergency management program must or should do; can relate to general emergency management principles or disaster-declaration specific	#LOC
What a state agency/department/partner must or should do; can relate to general emergency management principals or disaster-declaration specific	#SEMC

MICHIGAN EMERGENCY MANAGEMENT PLAN

This plan, developed and maintained pursuant to 1976 PA 390, as amended, MCL 30.407a, is hereby approved and current for emergency operations within the State of Michigan. All state departments and agencies are directed to follow the systems, assignments, protocols and procedures contained herein, and in applicable support plans, to the extent practicable, when responding to disasters or emergencies and/or providing supplemental relief assistance in support of local governments.

Gretchen Whitmer, Governor

11/29/2022

Date

Col. Joseph Gasper, State Director of Emergency Management and Homeland Security

7/25/2022

Date

Published by: Emergency Management and Homeland Security Division
Michigan Department of State Police
Attn: State and Local Support Section / State Planning Unit
7150 Harris Drive, Dimondale, Michigan 48821
517-284-3696
http://www.michigan.gov/emhsd

TABLE OF CONTENTS

EXECUTIVE SYNOPSIS **2**

RECORD OF CHANGES **2**

NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS) **2**

EMAP TABLE OF CONTENTS **4**

HOW TO USE THIS DOCUMENT **7**

- Summary of MEMP Layout 7
- How Local Emergency Managers use the MEMP 7
- How State Agencies, Departments, or Partners use the MEMP 7
- Keyword Index 7

MICHIGAN EMERGENCY MANAGEMENT PLAN **9**

TABLE OF CONTENTS **10**

ACRONYM GUIDE **13**

DEFINITIONS OF KEY TERMS **15**

PLAN APPROVAL, MAINTENANCE, AND DISTRIBUTION **34**

- Approval 34
- Maintenance 34
- Distribution 34

PLAN PURPOSE AND SCOPE **34**

- Purpose 34
- Scope 35

KEY LEGAL AUTHORITIES **35**

- Federal Government 35
- State Government 36
- Local Government 36

SITUATION AND ASSUMPTIONS **36**

- Situation 36
  - *Michigan's Hazard Analysis Summary* 36
  - *Michigan Profile* 38
  - *Persons with Access and Functional Needs* 38
  - *Capability Assessment* 38
  - *Mitigation Overview* 39
- Planning Assumptions 39

LOGISTICS SUPPORT AND RESOURCE REQUIREMENTS FOR PLAN IMPLEMENTATION **40**

- Mutual Aid: EMAC, NEMAC, MEMAC 41
- Donations Management 41
- Volunteers Management 41

TRAINING AND EXERCISE **41**

- Training 41

EXERCISE 42

FINANCE AND ADMINISTRATION……42

SUPPORT PLANS AND PROCEDURES…… 43

THREAT HAZARD IDENTIFICATION AND RISK ANALYSIS (THIRA) AND STAKEHOLDER PREPAREDNESS REIVEW (SPR)…… 44

MICHIGAN HAZARD ANALYSIS AND MICHIGAN HAZARD MITIGATION PLAN 44

EMERGENCY MANAGEMENT SYSTEM DESCRIPTION……47

LOCAL FRAMEWORK 47
STATE FRAMEWORK 47

RESPONSE PROCEDURES……49

LOCAL RESPONSE 49
REQUEST FOR STATE ASSISTANCE 50
STATE EMERGENCY/DISASTER DECLARATION 50
PROVISION OF STATE ASSISTANCE 51
SECTION 18 AND 19 FUNDING 51
HEIGHTENED STATE OF ALERT DECLARATION 52

OBTAINING FEDERAL ASSISTANCE……52

GOVERNOR'S REQUEST FOR FEDERAL ASSISTANCE 52
PRESIDENTIAL DECLARATION 52
PROVISION OF FEDERAL ASSISTANCE 52

LINE OF SUCCESSION FOR THE GOVERNOR……55

STATE DEPARTMENT/ AGENCY GENERAL RESPONSIBILITIES……55

LOCAL GOVERNMENT GENERAL RESPONSIBILITIES……55

SEOC OPERATIONS……56

SEOC OPERATIONS 60

LIFELINES…… 61

EMERGENCY SUPPORT FUNCTION DESCRIPTION……63

ESF 1: TRANSPORTATION **64**

ESF 2: COMMUNICATIONS **70**

ESF 3: PUBLIC WORKS AND ENGINEERING **81**

ESF 4: FIRE FIGHTING **88**

ESF 5: INFORMATION AND PLANNING **93**

ESF 6: MASS CARE, EMERGENCY ASSISTANCE, TEMPORARY HOUSING, AND HUMAN SERVICES **98**

ESF 7: LOGISTICS **108**

ESF 8: PUBLIC HEALTH AND MEDICAL SERVICES **114**

ESF 9: SEARCH AND RESCUE **126**

ESF 10: OIL AND HAZARDOUS MATERIALS **132**

ESF 11: AGRICULTURE AND NATURAL RESOURCES **140**

ESF 12: ENERGY **148**

ESF 13: PUBLIC SAFETY AND SECURITY **155**

ESF 14: CROSS-SECTOR BUSINESS & INFRASTRUCTURE **160**

ESF 15: EXTERNAL AFFAIRS **161**

DISASTER-SPECIFIC ANNEXES……166

CHEMICAL BIOLOGICAL RADIOLOGICAL NUCLEAR EXPLOSIVE (CBRNE) ATTACK (TERRORISM) – WEAPONS OF MASS DESTRUCTION ATTACKS 168

CIVIL DISTURBANCES – HUMAN-RELATED DISASTER 221

CYBERATTACKS – HUMAN-RELATED DISASTER 223

DROUGHT – NATURAL DISASTER 227

EARTHQUAKES – NATURAL DISASTER 229

ENERGY EMERGENCY – TECHNOLOGICAL DISASTER 231

EXTREME TEMPERATURES – NATURAL DISASTER 234

FLOODING – NATURAL DISASTER 236

HAZARDOUS MATERIAL INCIDENTS –TECHNOLOGICAL DISASTER 239

INSECT INFESTATION – NATURAL DISASTER 249

LARGE FIRES – TECHNOLOGIC DISASTER 251

NUCLEAR ATTACK (MILITARY)– WEAPONS OF MASS DESTRUCTION ATTACKS 254

NUCLEAR POWER PLANT INCIDENT – TECHNOLOGICAL DISASTER 268

OIL AND GAS WELL/PIPELINE ACCIDENTS – TECHNOLOGIC DISASTER 301

PASSENGER TRANSPORTATION ACCIDENTS –TECHNOLOGIC DISASTER 302

PUBLIC HEALTH EMERGENCIES – HUMAN-RELATED DISASTER 303

ESSENTIAL RESOURCE SHORTAGES – HUMAN-RELATED DISASTER 305

SEVERE STORMS (HIGH WIND) – NATURAL DISASTER 308

SUBSIDENCE –NATURAL DISASTER 309

WIDESPREAD PLANT OR ANIMAL DISEASE – NATURAL DISASTER 310

APPENDIX I: STATE SUPPORT PLAN LIST AND DESCRIPTIONS……...313

APPENDIX II: LIFELINES WORKSHEETS……319

SOURCES…… 324

PLANNING PRELIMINARIES

ACRONYM GUIDE

AAR	After Action Report
AFN	Access and Functional Needs
ARC	American Red Cross
BIA	Bureau of Indian Affairs
CAD	Computer Aided Dispatch
CAP	Civil Air Patrol
CASM	Communication Assets Survey and Mapping (Tool)
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosive
CDBG	Community Development Block Grant
CGS	Command and General Staff
CHECC	Community Health Emergency Coordination Center
CIKR	Critical Infrastructure and Key Resources
CISA/ECD	Cybersecurity and Infrastructure Security Agency/Emergency Communications Division
CJIC	Criminal Justice Information Center
CMEN	Central Michigan Emergency Network
COG	Continuity of Government
COML	Communications Unit Leader
COMT	Communications Technician
COOP	Continuity of Operations Plan
COW	Communications on Wheels
CPG 101	Community Planning Guidance (101)
DART	Disaster Assistance Recovery Team
DC	District Coordinator
DMR	Digital Mobile Radio
DRC	Disaster Recovery Center
DRC	Disaster Recovery Center Manager
DSDEM	Deputy State Director of Emergency Management
D-STAR	Digital Smart Technologies for Amateur Radio
DTMB/MPSCS	Department of Technology, Management, and Budget/ Michigan Public Safety Communications System
DTMB/NCC	Department of Technology, Management, and Budget/ National Communication Center
EAG	Emergency Action Guides
EAS	Emergency Alert System
ECC	Emergency Coordination Center
EDSSS	Emergency Department Syndromic Surveillance System
EMAC	Emergency Management Assistance Compact
EMAP	Emergency Management Accreditation Program
EMC	Emergency Management Coordinator
EMPG	Emergency Management Program Grant
EMWIN	Emergency Managers Weather Information Network
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ESF	Emergency Support Function
EWIDS	Early Warning Infectious Disease Surveillance
FCC	Federal Communications Commission
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FEMA/DEC	FEMA Disaster Emergency Communications
FM	Frequency Modulation
FNARS	FEMA National Radio System
FRMAC	Federal Radiological Monitoring and Assessment Center
GAR	Governor’s Authorized Representative
GETS	Government Emergency Telecommunications
GPS	Global Positioning System
HF	High Frequency
HSEEP	Homeland Security Exercise Evaluation Program
HSIN	Homeland Security Information Network

HUD	Housing and Urban Development
IAP	Incident Action Plan
ICP	Incident Command Post
ICS	Incident Command System
IHP	Individual Households Program
IMT	Incident Management Team
IP	Improvement Plan
IPAWS	Integrated Public Alert and Warning System
IROC	International Resource Ordering Capability
IWIN	Interactive Weather Information Network
JFO	Joint Field Office
JIC	Joint Information Center
JIS	Joint Information System
JSOP	Joint Standard Operation Procedures
LEIN	Law Enforcement Information Network
LEP	Limited English Proficient
LEPC	Local Emergency Planning Committee
LLA	Lessons Learned Advisor
MAB	Michigan Association of Broadcasters
MABAS	Mutual Aid Box Alarm System
MARC	Multi Agency Resource Center
MCCERCC	Michigan Citizen-Community Emergency Response Coordinating Council
MDSS	Michigan Disease Surveillance System
MEMAC	Michigan Emergency Management Assistance Compact
MEMP	Michigan Emergency Management Plan
MHA	Michigan Hazard Analysis
MHMP	Michigan Hazard Mitigation Plan
MI CIMS	Michigan Critical Incident Management System
MI MORT	Michigan Mortuary Response Team
MI VOAD	Michigan Voluntary Organizations Active in Disaster
MIHAN	Michigan Health Alert Notifications
MIOSC	Michigan Security Operations Center
MOU	Memorandums of Understanding
MSP	Michigan State Police
MSP/CVED	Michigan State Police/ Commercial Vehicle Enforcement Division
MSP/EMHSD	Michigan State Police/ Emergency Management and Homeland Security Division
NAWAS	National Attack Warning and Alert System
NCC	National Coordination Center
NDMS	National Disaster Medical System
NEMAC	Northern Emergency Management Assistance Compact
NGO	Non-Governmental Organizations
NICCL	National Incident Communications Conference Line
NIMS	National Incident Management System
NLETS	National Law Enforcement Telecommunications System
NPP	Nuclear Power Plant
NRF	National Response Framework
NRT	National Response Team
NSSA	National Nuclear Security Administration
NTIA	National Telecommunications and Information Administration
NTSB	National Transportation Safety Board
NVOAD	National Voluntary Organizations Active in Disaster
NWCG	National Wildlife Coordination Group
NWR	National Weather Radio
NWS	National Weather Service
NWWS	National Weather Wire Service
OGMD	Oil, Gas, and Minerals Division (of EGLE)
PDA	Preliminary Damage Assessment
PEM	Professional Emergency Management
PICCL	Private Sector Incident Communications Conference Line
PSAP	Public Safety Answering Point

REP	Radiological Emergency Preparedness
SAR	Search and Rescue
SATERN	Salvation Army Team Emergency Radio Network
SCAT	Shoreline Cleanup Assessment Team
SCO	State Coordinating Officer
SDEM	State Director of Emergency Management
SDEMHS	State Director of Emergency Management and Homeland Security
SEMC	State Emergency Management Coordinator
SEOC	State Emergency Operations Center
SFMO	State Financial Management Officer
SHARES	Shared Resources High Frequency Radio
SHMO	State Hazard Mitigation Officer
SIAO	State Individual Assistance Officer
SICCL	State Incident Communications Conference Line
SLEO	Senior Law Enforcement Officer
SME	Subject Matter Expert
SNS	Strategic National Stockpile
SOM	State of Michigan
SOP	Standard Operation Procedures
SOW	Site on Wheels
SPAO	State Public Assistance Officer
SPR	Stakeholder Preparedness Review
TBD	To be determined
TEPW	Training Exercise Planning Workshop
THIRA	Threat and Hazard Identification and Risk Assessment
TSC	Terrorist Screening Center
TSP	Telecommunications Service Priority
UAS	Unmanned Aerial System
UHF	Ultra High Frequency
USCG	United States Coast Guard
USDA	United States Department of Agriculture
VAL	Voluntary Agency Liaison
VHF	Very High Frequency
VOAD	Voluntary Organizations Active in Disaster
VRC	Volunteer Reception Center
WPS	Wireless Priority Service

DEFINITIONS OF KEY TERMS

ACCESS CONTROL POINT: A point established by law enforcement officials to control access to a hazardous or potentially hazardous area.

AIMING POINT: That area identified as the designated location of a nuclear detonation, also known as a target area.

ALTERNATE OPERATING FACILITY (AOF): Facilities, other than primary facilities, used to carry out Essential Functions under a Continuity of Operations Plan during a continuity incident.

Note: The terms “alternate location”, “alternate facility” and “alternate site” are commonly used in Continuity Plans in addition to or in place of the term “alternate operating facility”. These terms all represent the same type of facility. However, in the Michigan Continuity of Government Plan and this plan, the term “alternate operating facility or AOF” has been used consistently and in place of these other terms.

ALTERNATE SEAT OF GOVERNMENT (ASG): A complete relocation of one or more branches of government outside of the Constitutionally-mandated seat of Michigan State Government in Lansing, Michigan.

ALTERNATE STATE EMERGENCY OPERATIONS CENTER (ASEOC): The alternate center for coordination of state government response and recovery operations in time of disaster or emergency, activated in the event the primary State Emergency Operations Center (SEOC) is rendered inoperable for an extended period of time due to incident conditions or other reason. The ASEOC is maintained and operated by the Emergency Management and Homeland Security Division of the Michigan Department of State Police.

AREA COMMAND (UNIFIED AREA COMMAND): An organization established to: 1) oversee the management of multiple incidents that are each being handled by an Incident Command System (ICS) organization; or 2) oversee the management of large or multiple incidents to which several Incident Management Teams (IMTs) have been assigned. Area Command has the responsibility to set overall strategy and priorities, allocate critical resources according to priorities, ensure that incidents are properly managed, and ensure that objectives are met, and strategies followed. Area Command becomes Unified Area Command when incidents are multi-jurisdictional. Area Command may be established at an Emergency Operations Center (EOC) facility or at some location other than an Incident Command Post (ICP).

BIOLOGICAL AGENTS: Living organisms or the toxic materials derived from them that cause disease or harm to humans, animals or plants, or cause deterioration of material. Biological agents may be used as liquid droplets, aerosols, or dry powders. (Refer to the Weapons of Mass Destruction Attack Procedures for more detailed definitions of WMD agents.)

BLAST WAVE: A sharply defined wave of increased air pressure from the center of a nuclear detonation, measured in pounds per square inch (psi).

CATASTROPHIC INCIDENT (EVENT): Any natural or manmade incident, including terrorism, which results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions. A catastrophic incident could result in sustained national impacts over a prolonged period of time, and almost immediately exceeds resources normally available to state, local, tribal, and private sector authorities in the impacted area, and significantly interrupts governmental operations and emergency services to such an extent that national security could be threatened.

CBRNE WEAPONS: Weapons of Mass Destruction are also commonly referred to as “CBRNE” Weapons – an acronym for chemical, biological, radiological, nuclear, and explosives/incendiary devices. (Refer to “Weapon of Mass Destruction” for a more detailed definition.)

CHAIN OF COMMAND: A series of command, control, executive, or management positions in hierarchical order of authority.

CHEMICAL AGENTS: A chemical substance that is intended for use in military operations to kill, seriously injure, or incapacitate people through it physiological effects. The agent may be employed as a vapor, aerosol, or liquid; it can either be a casualty/toxic agent or an incapacitating agent. (Refer to the Weapons of Mass Destruction Attack Procedures for more detailed definitions of WMD agents.)

COLLECTION CENTER: Designated locations at which affected residents can dispose of their disaster-related debris. Collection Centers may be used when curbside debris collection is not practical (e.g., rural / sparsely populated areas or logistically difficult areas such as neighborhoods with steep hills). Residents transport their debris to the Collection Center and then place it in separate bins or piles for each particular type of debris.

COMMAND STAFF: In an incident management organization, the Command Staff consists of the Incident Command and the special staff positions of Public Information Officer, Safety Officer, Liaison Officer, and other positions as required, who report directly to the Incident Commander. They may have an assistant or assistants, as needed.

COMPREHENSIVE EMERGENCY MANAGEMENT (CEM): An integrated approach to the management of programs and activities that encompasses all phases (prevention, mitigation, preparedness, response, and recovery) of incident management, all types of emergencies and disasters (natural, technological, human-related, and WMD attack), all levels of government (local, state, tribal, and federal), nongovernmental organizations, and the private sector. (Note: CEM was a commonly used term prior to development of the National Response Framework. Now, the term “domestic incident management” is preferred. However, CEM is still widely used in the emergency management field and the two terms mean essentially the same thing.)

CONSEQUENCE MANAGEMENT: Measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses and individuals affected by the consequences of terrorism.

CONTAMINATION: The deposit of chemical, biological or radioactive material on the surfaces of structures, objects, or persons following a nuclear incident/explosion or a hazardous material incident.

CONTINGENCY PLANNING: Planning that occurs before an incident, or in the pre-incident phase, and provides guidance for conducting operations.

CONTINUITY OF GOVERNMENT and CONTINUITY OF OPERATIONS PLANNING:

Important notes regarding Continuity of Government (COG) vs. Continuity of Operations Planning (COOP) definitions below: No universally agreed upon definitions for COG and COOP currently exist. For all intents and purposes, the two efforts (COG and COOP) attempt to achieve the same end result; that is, the continued effective functioning of government and governmental agencies. The primary difference between the two efforts is really a matter of degree. Continuity of Operations Planning is primarily concerned with the ability of individual departments and agencies to continue to operate and provide essential functions and services in time of emergency or catastrophe. Continuity of Government planning goes beyond the department/agency level and addresses the ability of the three branches of government (Executive, Judicial, and Legislative) to survive and effectively work together to ensure the continuation of Constitutional and legal governance. Continuity of Government planning builds upon and complements the COOP efforts of the three governmental branches: the individual departments and agencies within the Executive Branch, the courts within the Judicial Branch, and both chambers of the Legislature (i.e., Senate, House of Representatives) within the Legislative Branch. For the purposes of the Michigan Continuity of Government Plan and this plan, three definitions of COOP and COG are provided from three notable sources: 1) the Emergency Management Accreditation Program (EMAP); 2) Federal Continuity Directive 1 – "Federal Executive Branch National Contingency Program and Requirements", January 2008; and 3) Federal Continuity Guidance Circular 1 – "Continuity Guidance for Non-Federal Entities", January 2009. (It should be noted that the CGC-1 guidance for "non-federal entities" uses definitions that are clearly aimed at the federal government. However, because it is the federal government's current continuity guidance for States it has been included here for reference.)

CONTINUITY OF GOVERNMENT (COG):

EMAP Standard, September 2007 Edition, Chapter 2 – Definitions, 2.2 – Continuity of Government. Capability to ensure survivability of constitutional and democratic government and the continuity of essential government functions.

Federal Continuity Directive 1, "Federal Executive Branch National Contingency Program and Requirements", January 2008, Continuity of Government. A coordinated effort within each branch of government (Executive, Judicial, and Legislative) to ensure the eight National Essential Functions as outlined in National Security Presidential Directive 51 / Homeland Security Presidential Directive 20 continue to be performed during a catastrophic emergency.

Federal Continuity Directive 1 also goes beyond the definition of COG and defines Enduring Constitutional Government as a cooperative effort among the Legislative, Executive, and Judicial branches, with proper respect for the Constitutional separation of powers among the branches, to preserve the Constitutional framework under which the Nation is governed and the capability of all three branches of government to execute their Constitutional responsibilities and provide for the orderly succession, appropriate transition of leadership, interoperability, and support of the National Essential Functions during a catastrophic emergency.

Federal Continuity Guidance Circular 1, "Continuity Guidance for Non-Federal Entities", January 2009, Continuity of Government. A coordinated effort within the Federal Government's executive branch to ensure that NEFs (National Essential Functions) continue to be performed during a catastrophic emergency.

CONTINUITY OF OPERATIONS PLANNING (COOP):

EMAP Standard, September 2007 Edition, Chapter 2 – Definitions, 2.3 – Continuity of Operations. Capability to continue essential program functions and to preserve essential facilities, equipment, and records across a broad range of potential emergencies.

Federal Continuity Directive 1, "Federal Executive Branch National Contingency Program and Requirements", January 2008, Continuity of Operations. An effort within individual organizations to ensure that mission essential functions and primary mission essential functions continue to be performed during a wide range of emergencies, including localized acts of nature, accidents, and technological or attack-related emergencies.

Federal Continuity Guidance Circular 1, "Continuity Guidance for Non-Federal Entities", January 2009, Continuity of Operations. An effort within individual agencies to ensure they can continue to perform their MEFs (Mission Essential Functions) and PMEFs (Primary Mission Essential Functions) during a wide range of emergencies, including localized acts of nature, accidents, and technological or attack-related emergencies.

CONTINUITY INCIDENT/EVENT: Any incident that causes an agency, wholly or partially, to relocate to an alternate or continuity site in order to ensure continuance of its Essential Functions. Also, may be known as “continuity event”.

CONTROL CHECK POINT: Officially designated locations where trucks and other transport vehicles containing unsolicited donated goods can be inspected and directed to an appropriate volunteer agency or other location for processing, storage, and distribution. Unaffiliated volunteers from outside the disaster area wishing to provide services can also be interviewed at these locations. Examples of possible Control Check Point locations include toll booths, weigh stations, roadside parks, truck stops, state parks and recreation areas, county fairgrounds, highway rest areas, armories, and other governmental facilities (located in close proximity to major transportation routes) that have large parking areas for vehicle inspections.

COUNTY OR LOCAL EMERGENCY MANAGEMENT COORDINATOR (EMC): A person appointed pursuant to 1976 PA 390, as amended, to coordinate emergency management activities for a county or municipal emergency management program jurisdiction. The position in which authority is vested for everyday direction, supervision, and administration of the total emergency management program is considered the “Emergency Manager”. The EMC and Emergency Manager can be the same person. (Also see “State Emergency Management Coordinator”)

CRISIS MANAGEMENT: Measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism.

CRITICAL INFRASTRUCTURE: Systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters.

CYBER: Pertaining to computers and their support systems, such as servers, routers, and switches, which support critical infrastructure.

DAMAGE ASSESSMENT: The systematic process of determining and appraising the nature and extent of the loss, suffering, or harm to a community resulting from a disaster or emergency.

DEBRIS: Scattered items and material that is broken, destroyed, or displaced by a natural or human-caused disaster. Examples include trees, construction and demolition material, and personal property.

DEBRIS CLEARANCE: Clearing of major road arteries by pushing debris to the roadside to accommodate emergency traffic.

DEBRIS DISPOSAL: Placing mixed debris and/or byproduct from volume reduction operations into an approved landfill or other approved location.

DEBRIS MANAGEMENT CENTER: The facility established at or near the Emergency Operations Center from which the debris management function is coordinated. (Note: Debris Management Centers can be established at both the local and state levels. The State’s facility is called the “State Disaster Debris Management Center”.)

DEBRIS MANAGEMENT SITE: A location where debris is temporarily stored until it is sorted, processed, reduced in volume and/or taken to a permanent landfill or other approved location. (Note: More commonly known as “Temporary Debris Storage and Reduction [TDSR] Site”.)

DEBRIS MANAGEMENT TEAM: The team made up of representatives of governmental departments / agencies and nongovernmental relief organizations who are responsible for managing the clearance, separation, removal, transportation, storage, reduction, and disposal of disaster debris. The team’s mission is to implement this Disaster Debris Management Plan, with the ultimate aim of protecting public health and safety and facilitating response and recovery operations by rapidly and efficiently managing disaster debris.

DEBRIS MANAGEMENT SYSTEM: (See “State Debris Management System”.)

DEBRIS REMOVAL: Picking up debris and taking it to a Debris Management Site (a.k.a., “Temporary Debris Storage and Reduction” [TDSR] Site) or permanent landfill or other approved location.

DECONTAMINATION: The reduction or removal of contaminating material from a structure, area, object, or person. Decontamination may be accomplished by 1) treating the surface so as to remove or decrease the contamination; 2)

letting the material stand so that the contamination is decreased as a result of natural decay; and 3) covering the contamination.

DECONTAMINATION CENTER: A location with shower facilities and a large parking area used to monitor evacuees for contamination and to decontaminate evacuees and their belongings, if necessary. Several of these centers may be established on the periphery of the hazard area. They may also double as reception centers.

DEFENSE COORDINATING OFFICER (DCO): The single point of contact for the Department of Defense (DOD) at the Joint Field Office (JFO) for requesting assistance from DOD. A designated DCO has been appointed in each of the 10 Federal Regions. Most requests for Defense Support of Civil Authorities (DSCA) originating at the Joint Field Office (JFO) are coordinated with and processed through the DCO. Responsibilities of the DCO include processing requirements for military support, forwarding mission assignments to appropriate military organizations through designated channels, and assigning military liaisons to activated Emergency Support Functions (ESFs).

DEMOBILIZATION: The orderly, safe, and efficient return of a resource to its original location and status. Demobilization begins as soon as possible to facilitate accountability of the resources and to be fully coordinated with other incident management and response structures.

DEPARTMENT OF HOMELAND SECURITY (DHS): A Cabinet-level agency established within the federal government in 2002 to coordinate and report directly to the President on all issues related to domestic terrorism preparedness. The mission of the Department of Homeland Security is to oversee and coordinate a comprehensive national strategy to safeguard the country against terrorism and other homeland security threats, and to respond to any attacks that may occur.

DEPUTY STATE DIRECTOR OF EMERGENCY MANAGEMENT (DSDEM): The Division Commander of the Emergency Management and Homeland Security Division, Department of State Police (MSP/EMHSD) is the designated Deputy State Director of Emergency Management. The DSDEM is the authorized representative for the State Director of Emergency Management and Homeland Security (SDEMHS – the Director of the Department of State Police) for emergency management and homeland security functions.

DIRECT WEAPONS EFFECTS: The immediate emissions of a nuclear detonation considered most hazardous; namely, blast, heat, and initial nuclear radiation.

DISASTER: An occurrence or threat of widespread or severe damage, injury, or loss of life or property resulting from a natural or human-made cause, including but not limited to; fire, flood, snowstorm, ice storm, tornado, windstorm, wave action, oil spill, water contamination, utility failure, hazardous peacetime radiological incident, major transportation accident, hazardous materials incident, epidemic, air contamination, blight, drought, infestation, explosion, or hostile military or paramilitary action, or similar occurrences resulting from terrorist activities, riots, or civil disorders, as defined in 1976 PA 390, as amended.

DISASTER COMMODITIES: Goods, materials, equipment, supplies, technical expertise, and other resources needed to assist in carrying out required disaster response and recovery operations, to make necessary and immediate repairs to damaged facilities, to protect the affected population from further harm, and/or to provide for the basic life-sustaining needs of the affected population.

DISASTER LOGISTICS MANAGEMENT: The process of planning, preparing, implementing, and evaluating all functions that support the determination of need and request for, and the assessment, procurement, receipt, transport, staging, storage, and distribution of needed disaster commodities to appropriate end-users in an efficient, time- and cost-effective, and coordinated manner. Logistics management functions may include materiel management, property management, facility management, and transportation management.

DISASTER MITIGATION ACT (DMA) OF 2000: Public Law 106-390, signed into law on October 30, 2000, which amended sections of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act – see separate definition) and placed new hazard mitigation planning requirements on states and local governments in order to obtain Stafford Act disaster relief assistance.

DISASTER RECOVERY CENTER (DRC): A facility established within or near a disaster area at which disaster victims (individuals, families, or businesses) can apply for disaster aid, and that functions as a “one-stop” information source for disaster recovery and hazard mitigation related issues. DRCs are staffed by personnel from FEMA and other federal

departments/agencies, and applicable representatives from state and local departments/agencies, and private voluntary relief organizations.

DISASTER RELIEF FORCES: All departments/agencies of state, county and municipal government, private and volunteer personnel, public officers and employees, and all other persons or groups of persons having duties or responsibilities under 1976 PA 390, as amended, or pursuant to a lawful order or directive authorized under this act.

DISTRIBUTION CENTER: A facility operated by a local government, local church or other faith-based organization, community-based organization, or voluntary agency for providing needed commodities (donated and/or procured) directly to disaster victims. Also commonly called “Point of Distribution” or POD.

DISTRICT COORDINATOR: The MSP/EMHSD employee serving at any of seven State Police district headquarters, whose primary job is to work directly with local communities on emergency management and homeland security activities.

DOMESTIC READINESS GROUP (DRG): A federal interagency body convened on a regular basis to develop and coordinate preparedness, response, and incident management policy. This group evaluates various policy issues of interagency importance regarding domestic preparedness and incident management and makes recommendations to senior levels of the policymaking structure for decision. During an incident, the DRG may be convened by the Department of Homeland Security (DHS) to evaluate relevant interagency policy issues regarding incident management and response, and to develop recommendations as may be required.

DONATIONS MANAGEMENT CENTER: The facility established at or near the Emergency Operations Center from which the donations management function is coordinated. (If a disaster logistics management function has also been established, the Donations Management Center may be co-located with the logistics management operation.)

DONATIONS MANAGEMENT TEAM: The team made up of representatives of governmental departments/agencies and nongovernmental relief organizations who have a vested interest in the effective management of donated goods and voluntary services. The team’s mission is to implement this Disaster Donations Management Plan, with the ultimate aim of effectively managing disaster donations and minimizing the influx of unsolicited, unneeded, and unwanted goods and services into the disaster area.

DOSIMETER: A radiation monitoring device that measures the amount of radiation to which the instrument has been exposed. It comes in both permanent record and self-reading types.

ELECTROMAGNETIC PULSE (EMP): An EMP is a short burst of electromagnetic radiation that may affect or damage electrical or electronic components and equipment. The origination of such a pulse may be a natural occurrence (solar flare) or man-made (nuclear detonation).

EMERGENCY: Any occasion or instance in which assistance is needed to supplement efforts to save lives, protect property and the public health and safety, or to lessen or avert the threat of a disaster or catastrophe.

EMERGENCY ACTION LEVEL CLASSIFICATION SYSTEM: A system for classifying emergencies or disasters according to their level of severity. State and local emergency response organizations use this classification system as a basis for emergency actions in accordance with the appropriate emergency operations plan.

EMERGENCY COORDINATION CENTER (ECC): The site, established by each state department, where department officials gather to provide logistical support, policy direction, and technical assistance to the department representative in the SEOC or Alternate State Emergency Operations Center (ASEOC), and to strategically plan and implement the department’s disaster response and recovery activities. Each state department is tasked to identify, develop, and maintain an ECC as part of its emergency and business continuity planning efforts.

EMERGENCY MANAGEMENT ACT: Refer to “Michigan Emergency Management Act”.

EMERGENCY MANAGEMENT ASSISTANCE COMPACT (EMAC): The interstate agreement that streamlines the assistance one governor can lend to another after a natural, technological, or human-caused disaster (including a terrorist attack) by providing a framework for flexible response. The EMAC was first introduced in 1993 and the National Emergency Management Association (NEMA) administers the program on behalf of the member states. The EMAC is an arrangement of the states, by the states, and for the states, and also includes all US territories. It addresses all the issues associated with requesting assistance, reimbursement of services, workers’ compensation insurance, and liability in

advance of a disaster. In January 2001, Michigan became the 43rd state to join the EMAC. There are currently 54 EMAC signatories.

EMERGENCY MANAGEMENT COORDINATOR (EMC): The person appointed pursuant to 1976 PA 390, as amended, to coordinate emergency management activities for an emergency management program or state department. The position in which authority is vested for everyday direction, supervision, and administration of the total emergency management program is considered the "Emergency Manager". The EMC and Emergency Manager can be the same person. State Department Emergency Management Coordinators include representatives from the Executive, Judicial, and Legislative Branches of Michigan State Government. (Also see "County or Local Emergency Management Coordinator" and "State Emergency Management Coordinator".)

EMERGENCY MANAGEMENT AND HOMELAND SECURITY DIVISION (MSP/EMHSD): The division within the Department of State Police that coordinates the comprehensive emergency management and homeland security activities (prevention, mitigation, protection, preparedness, response, and recovery) of state and local government and maintains the Michigan Emergency Management Plan.

EMERGENCY MANAGEMENT ACCREDITATION PROGRAM (EMAP): A standards-based, voluntary assessment and peer review accreditation process for government programs responsible for coordinating prevention, mitigation, preparedness, response, and recovery activities for natural and human-caused disasters. Accreditation is based on compliance with collaboratively developed national standards (the "Emergency Management Standard") by the Emergency Management Accreditation Program (EMAP), an independent non-profit organization. Accreditation is open to all U.S. states, territories, and local government emergency management programs.

Background Note: In April 2011, after several years of assessment and evaluation, Michigan gained full EMAP accreditation from the EMAP Commission, becoming only the 32nd state or local jurisdiction nationwide (at that time) to achieve such status.

EMERGENCY MANAGEMENT PROGRAM: The basic emergency planning and operational entity at the local government level. Each county has an appointed emergency management coordinator and enabling-legislation creating an emergency management program. In accordance with the provisions of 1976 PA 390, as amended, municipalities with a population of 10,000 or more may elect to also appoint an emergency management coordinator and maintain a separate emergency management program from the county in which they are located.

EMERGENCY OPERATIONS CENTER (EOC): The site at which the coordination of information and resources to support incident management activities normally takes place. An EOC may be a temporary or permanent facility and may be organized by major functional disciplines (e.g., fire, law enforcement, medical services), by jurisdiction (e.g., federal, state, regional, county, city or tribal), or by some combination thereof. (Also see "State Emergency Operations Center".)

EMERGENCY OPERATING FACILITY (EOF): A nuclear power plant operator's emergency operating center, in which representatives from the plant owner/operator and the Nuclear Regulatory Commission gather.

EMERGENCY OPERATIONS PLAN (EOP): The plan developed and maintained by an emergency management program jurisdiction as a counterpart to the Michigan Emergency Management Plan for the purpose of organizing and coordinating the emergency management activities of the jurisdiction(s) under the plan. An EOP usually consists of a basic plan or other introductory section with various supporting annexes for each service or function.

EMERGENCY PLANNING ZONE (EPZ): The area around a nuclear power plant for which planning is required to assure that prompt and effective action will be taken to protect the public in the event of an incident. (Refer to the Technological Disaster Procedures/Nuclear Power Plant Incidents section for a diagram and narrative describing this concept.)

EMERGENCY PUBLIC INFORMATION: Information that is disseminated primarily in anticipation of an emergency or during an emergency.

EMERGENCY REPATRIATION CENTER (ERC): The primary onsite coordinating center at a designated Port of Entry (POE) for the processing of repatriates as they reenter the United States. Michigan's designated POE is the Detroit Metropolitan Wayne County (DTW) Airport. An ERC would be established at that location to process repatriates.

EMERGENCY SUPPORT FUNCTION (ESF): A grouping of department/agency capabilities into an organizational structure to provide the support, resources, program implementation, and services that are most likely to be needed to prevent injuries, save lives, protect property and the environment, restore essential services and critical infrastructure, and

help survivors and communities return to normal, when feasible, following a disaster or emergency. Capabilities can include but are not limited to personnel, equipment, material goods, professional knowledge and expertise, financial resources, legal authorities, and facilities. Each ESF is headed by a Lead Agency, with one or more agencies designated as Support Agencies based on their resources and capabilities to support the function. The ESFs serve as the primary operational-level mechanism through which state departments and agencies provide assistance to local communities. The Michigan Emergency Management Plan (MEMP) has eight ESFs and the National Response Framework (NRF) has a total of 14 ESFs.

EXECUTIVE DIRECTIVE 2005-9: A Michigan Executive Directive issued by Governor Jennifer Granholm on September 29, 2005, that adopted the National Incident Management System (NIMS) as the state standard for incident management in Michigan.

EXECUTIVE ORDER 2003-6: A Michigan Executive Order issued by Governor Jennifer Granholm on April 15, 2003, that established: 1) the office of Assistant Adjutant General for Homeland Security (within the Department of Military and Veterans Affairs) to advise the Governor and state agency directors on the development of homeland security policies, programs and procedures; 2) the Michigan Homeland Protection Board (within the Department of State Police) to develop, implement and revise a state homeland security strategy; and 3) the Michigan Homeland Security Advisory Council to advise the Board and to provide input, advice, and recommendations on homeland security issues. EO 2003-6 also abolished the Michigan Homeland Security Task Force established by Executive Directive 2002-1, re-affirmed the existing homeland security roles and responsibilities within the Department of State Police, and directed state agencies to actively participate in state homeland security efforts.

Note: EO 2003-6 was rescinded in its entirety and replaced by EO 2009-52, effective October 29, 2009, which in turn was replaced by EO 2017-1. EOs 2009-52 and 2017-1 were necessary to address changes that had occurred in state governmental organizational structure. See EO 2017-01 definition below.

EXECUTIVE ORDER 2017-1: A Michigan Executive Order issued by Governor Richard D. Snyder on March 8, 2017, that rescinded Executive Order 2009-52 in its entirety (EO 2009-52 had rescinded EO 2003-6 in March 2009) and updated the Michigan Homeland Protection Board and Michigan Homeland Security Advisory Council to reflect organizational changes that had occurred in state government since EO 2009-52 was put in place. Executive Order 2017-1 also reaffirmed the roles of the State Director of Emergency Management and Homeland Security (SDEMHSD) and Deputy State Director of Emergency Management. (DSDEM) within the Department of State Police, as well as the emergency management and homeland security mission of the Emergency Management and Homeland Security Division of the Department of State Police.

ESSENTIAL RESOURCE: Any facility, supply, or piece of equipment considered vital to emergency operations, and which should be protected either by movement away from a direct risk or securing it in place.

EVACUATION: A population protection strategy that provides for the orderly movement of people away from an actual or potential hazard.

FALLOUT (RADIOACTIVE): The process of the fallback to the earth's surface of radioactive particles. The term is also applied, in a collective sense, to the contaminated particulate matter itself. The early (or local) fallout is defined, somewhat arbitrarily, as those particles that reach the earth within 24 hours after a nuclear explosion. The delayed (or worldwide) fallout consists of the smaller particles that ascend into the upper troposphere and into the stratosphere and are carried by winds to all parts of the earth. The delayed fallout is brought to earth mainly by rain or snow, over extended periods ranging from months to years.

FALLOUT SHELTER (PUBLIC): A habitable structure used to protect its occupants from radioactive fallout. Such a shelter shall have a minimum protection factor of 40, a minimum of 10 square feet of floor space per person, 65 cubic feet of space per person, and at least 3 cubic feet of fresh air per minute when capacity is based on minimum space requirements. In unventilated underground space, 500 cubic feet of space per person is required. Other fallout shelter types include: 1) Expedient Shelter – A shelter constructed on a crash basis by individuals or families; and 2) Upgraded Shelter – Shelter space obtained by taking actions to improve fallout protection in existing facilities usually accomplished by adding mass overhead and to walls through use of earth and other materials.

FEDERAL COORDINATING OFFICER (FCO): The federal officer appointed by the President to manage federal resource support activities related to Stafford Act major disasters and emergencies – including the provision of individual assistance, public assistance, and hazard mitigation assistance. The FCO is responsible for coordinating the timely

delivery of federal disaster assistance resources and programs to the affected state and local governments, individuals and families, and the private sector.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA): The primary federal agency that coordinates emergency planning, preparedness, mitigation, response, and recovery within the federal government, and administers the President's Disaster Relief Program. FEMA is housed within the federal Department of Homeland Security.

FEDERAL-STATE AGREEMENT: The document that states the understandings, commitments, and conditions for assistance under which FEMA disaster assistance shall be provided. This agreement imposes binding obligations on FEMA, the State, and local governments in the form of conditions for assistance which are legally enforceable.

FIRST RESPONDER: Police, fire, and emergency personnel who, in the early stages of an incident, are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) who provide immediate support services during prevention, response, and recovery operations. First responders may include personnel from federal, state, local, tribal, and nongovernmental organizations.

HAZARD MITIGATION: Any action taken to reduce or permanently eliminate the long-term risk to human life and property from natural, technological, and human related hazards.

HAZARDOUS WASTE: Material and products from institutional, commercial, recreational, industrial, and agricultural sources that contain certain chemicals with one or more of the following characteristics, as defined by the U.S. Environmental Protection Agency (EPA): 1) toxic, 2) flammable, 3) corrosive, and/or 4) reactive.

HEIGHT OF BURST (HOB): The height above the earth's surface at which a bomb is detonated in the air.

HOMELAND SECURITY PRESIDENTIAL DIRECTIVE (HSPD)-5: A Presidential directive issued on February 28, 2003, that is intended to enhance the ability of the United States to manage domestic incidents (which include terrorist attacks, major disasters, and other emergencies) by establishing a single, comprehensive National Incident Management System (NIMS). Refer to the "National Incident Management System (NIMS)" and "National Response Framework (NRF)" definitions for additional information.

HOMELAND SECURITY PRESIDENTIAL DIRECTIVE (HSPD)-7: A Presidential directive issued on December 17, 2003, that established a national policy for federal departments and agencies to identify and prioritize U.S. critical infrastructure and key resources, and to protect them from terrorist attacks.

HOMELAND SECURITY PRESIDENTIAL DIRECTIVE (HSPD)-8: A Presidential directive issued on December 17, 2003, that established policies to strengthen the preparedness of the United States to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies by requiring a national domestic all-hazards preparedness goal, establishing mechanisms for improved delivery of federal preparedness assistance to states and local governments, and outlining actions to strengthen preparedness capabilities of federal, state, and local entities.

HOT ZONE: The exclusion area around the hazardous material incident. The size of the "hot zone" will vary depending on the material involved. (Refer to the Technological Disaster Procedures / Hazardous Material Incidents section for a diagram and narrative describing this concept.)

INCIDENT: An occurrence or event, natural or human-caused, which requires an emergency response to protect life or property. Incidents can include major disasters, emergencies, terrorist attacks, and terrorist threats.

INCIDENT ACTION PLAN (IAP): An oral or written plan containing general objectives reflecting the overall strategy for managing an incident. It may include the identification of operational resources and assignments, as well as attachments that provide direction and important information for management of the incident during one or more operational periods.

INCIDENT COMMAND POST (ICP): The field location at which the primary tactical-level, on-scene incident command functions are performed. The ICP may be co-located with other incident facilities and is normally identified by a green rotating or flashing light.

INCIDENT COMMAND SYSTEM (ICS): A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of

single or multiple incidents, without being hindered by jurisdictional boundaries. The ICS is the combination of facilities, equipment, personnel, procedures, and communications operating with a common organizational structure, designed to aid in the management of resources during an incident. The ICS is used for all types of emergencies and is applicable to small as well as large and complex incidents.

Note: The State of Michigan follows an IMS in the State Emergency Operations Center (SEOC) for all disasters and emergencies. Refer to the Direction and Control ESF for more information. The SEOC IMS is consistent and compatible with the National Incident Management System (NIMS). Refer to the NIMS definition.

INCIDENT COMMANDER (IC): The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site. (Note: Within the SEOC, the IC is normally the MSP/EMHSD commander or another designated senior official from the MSP/EMHSD.)

INDIRECT WEAPONS EFFECTS: The less immediate effects of a nuclear detonation, mostly fallout, affecting areas where a direct nuclear explosion has not occurred.

INDUSTRIAL AGENTS: Chemicals developed or manufactured for use in industrial operations or research by industry, government, or academia. These chemicals are not manufactured for the specific purpose of producing human casualties or rendering equipment, facilities, or areas dangerous for use by humans. Hydrogen cyanide, cyanogen chloride, phosgene, chlorine, chloropicrin, and many herbicides and pesticides are industrial chemicals that also can be chemical agents. (Refer to the Weapons of Mass Destruction Attack Procedures section for more detailed definitions of WMD agents.)

INFRASTRUCTURE: Manmade physical systems, assets, projects, and structures – publicly and/or privately owned – which are used by or provide benefit to the public. Examples of infrastructure include but are not limited to utilities, bridges, levees, drinking water systems, electrical systems, communications systems, dams, sewage systems, and roads.

IN-KIND DONATIONS: Donations other than cash (usually materials or professional services) for disaster survivors.

IN-PLACE SHELTERING: A population protection strategy that provides for the sheltering indoors of people to prevent contact with a hazard.

INTERAGENCY INCIDENT MANAGEMENT GROUP (IIMG): A federal Department of Homeland Security (DHS) headquarters-level coordination entity staffed by a tailored group of senior federal interagency experts who provide strategic advice to the Security of Homeland Security during an actual or potential incident.

JOINT FIELD OFFICE (JFO): A temporary federal facility established locally (i.e., in or close to a federally-designated disaster area) to provide a central point for federal, state, local, and tribal officials with responsibility for incident oversight, direction and/or assistance to effectively coordinate protection, prevention, mitigation, preparedness, response, and recovery actions.

JOINT INFORMATION CENTER (JIC) – a.k.a. JOINT PUBLIC INFORMATION CENTER (JPIC): A facility established to coordinate all incident-related public information activities. It is the central point of contact for all news media at the scene of the incident. Public information officials from all participating agencies and organizations are co-located at the JIC. (Note: JIC is the preferred name; JPIC is now obsolete.)

JOINT OPERATIONS CENTER (JOC): A Federal Bureau of Investigation (FBI) facility established to manage a terrorist threat based upon a graduated and flexible response. The JOC is the focal point for all federal investigative law enforcement activities during a terrorist or potential terrorist incident or any other significant criminal incident. It is managed by the Senior Federal Law Enforcement Official (SFLEO) – normally the FBI Senior Agent-in-Charge (SAC). The JOC consists of four functional groups: Command; Operations; Support; and Consequence Management. The Consequence Management Group consists of representatives from federal, state, and local consequence management organizations to address pre-release and post-release consequence operations. The JOC becomes a component of the Joint Field Office (JFO) when the National Response Framework (NRF) is activated.

LOCAL STATE OF EMERGENCY: A declaration by a county or municipality with an appointed emergency management coordinator (pursuant to 1976 PA 390, as amended), when circumstances indicate that the occurrence or threat of widespread or severe damage, injury, or loss of life or property from natural or human-made cause exists.

LOGISTICS MANAGEMENT CENTER: The facility established at or near the Emergency Operations Center from which the disaster logistics management function is coordinated. (If a disaster donations management function has also been established, the Logistics Management Center may be co-located with the donations management operation.)

LOGISTICS MANAGEMENT TEAM: The team made up of representatives of nongovernmental organizations and governmental departments/agencies who have a vested interest in the effective management of disaster commodities. The team's mission is to implement the jurisdiction's Disaster Logistics Management Plan, with the ultimate aim of ensuring the efficient, time-effective, and cost-effective delivery of disaster commodities to those in need in the jurisdiction.

MAJOR DISASTER: Any natural catastrophe (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought) or, regardless of cause, any flood, fire, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under the Stafford Act to supplement the efforts and available resources of states, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.

MICHIGAN EMERGENCY MANAGEMENT ACT – a.k.a. EMERGENCY MANAGEMENT ACT: Act 390, PA 1976, as amended, the basic state emergency management enabling legislation. This Act prescribes the power and duties of the Governor and certain state and local agencies and officials related to preparing for, responding to, recovering from, and mitigating disasters and emergencies. Act 390 prescribes immunities and liabilities related to disaster relief work and establishes the organizational framework for the emergency management system used in the state. (Note: Emergency Management Act is the official name; however, it is most often referred to as the Michigan Emergency Management Act.)

MICHIGAN EMERGENCY MANAGEMENT ASSISTANCE COMPACT (MEMAC): The statewide mutual-aid assistance compact, authorized under 1976 PA 390, as amended, that allows participating jurisdictions to render or receive assistance in time of crisis and share vital public safety services and resources more effectively and efficiently. The MEMAC is designed specifically for those situations in which a participating jurisdiction has exhausted its local resources (including those available through local/regional mutual aid, or reciprocal aid compacts, or agreements), or its resources are inadequate or overwhelmed in response to a threat or event being faced, and it requires additional resources (provided in a timely manner) to protect public health and safety, property, or the environment. (The MSP/EMHSD administers the MEMAC on behalf of the State of Michigan and is responsible for processing requests for resources by participating jurisdictions.)

MICHIGAN EMERGENCY MANAGEMENT PLAN (MEMP): The plan developed and continuously maintained by the MSP/EMHSD, pursuant to 1976 PA 390, as amended, for the purpose of coordinating the emergency management and homeland security activities of prevention, mitigation, preparedness, response, and recovery within the state. The MEMP consists of two introductory sections (i.e., Planning Preliminaries; Emergency Management System), eight Emergency Support Functions (ESFs), 23 Disaster-Specific Procedures, and three Support Plans (i.e., Evacuation and Mass Shelter Support; Animal Care Support; Recovery Support). The MEMP is supported by numerous other state-level, function-specific plans, including but not limited to those that address; continuity of government and continuity of operations; disaster logistics and donations management; disaster debris management; hazard mitigation; emergency repatriation; damage assessment; and mass fatality management.

MICHIGAN HAZARD MITIGATION PLAN (MHMP): The plan developed and continuously maintained by the MSP/EMHSD, in partnership with appropriate governmental and nongovernmental stakeholders and the public, which describes and coordinates the hazard mitigation activities of state departments/agencies designed to reduce or eliminate the effects of disasters and emergencies on Michigan residents and communities.

MICHIGAN INTELLIGENCE OPERATIONS CENTER (MIOC): The state "fusion center" established to provide 24-hour per day, statewide information sharing among local, state, tribal and federal public safety agencies and private sector organizations in order to facilitate the collection, analysis, and dissemination of intelligence relevant to terrorism and public safety. The MIOC is operated by the Department of State Police in accordance with Executive Order 2012-5.

MICHIGAN VOLUNTARY ORGANIZATIONS ACTIVE IN DISASTER (MIVOAD): The Michigan chapter of the National Voluntary Organizations Active in Disaster (NVOAD), an umbrella organization of established and experienced voluntary organizations that provide disaster services in all phases of emergency management, but with emphasis on response and recovery. The MIVOAD fosters cooperation, communication, coordination, and collaboration among its Michigan-based voluntary organizations. In the response and recovery phases, each individual organization functions independently, yet

cooperatively. The MIVOAD serves as a clearinghouse and coordinating body for the provision of support services to a variety of response and/or recovery operations, working in coordination and cooperation with other involved state departments/agencies and nongovernmental organizations in the SEOC or ASEOC. The MIVOAD may also work directly with affected local government Emergency Operations Centers in incident response and/or recovery support activities.

MOBILIZATION: The process and procedures used by all organizations (federal, state, tribal, local, private) for activating, assembling, and transporting resources that have been requested to respond to and/or support an incident.

MULTI-JURISDICTIONAL INCIDENT: An incident requiring action from multiple agencies that each have jurisdiction to manage certain aspects of an incident. In the ICS, these incidents will be managed under Unified Command.

MUTUAL AID AGREEMENT: A written agreement between agencies, organizations, and/or jurisdictions that indicates that they will assist one another upon request by furnishing personnel, equipment, materials, and/or expertise in a specified manner.

NATIONAL COUNTERTERRORISM CENTER (NCTC): The primary federal organization for analyzing and integrating all intelligence possessed or acquired by the U.S. Government pertaining to terrorism and counterterrorism. The NCTC may (consistent with applicable law) receive, retain, and disseminate information from any federal, state, or local government, or other source necessary to fulfill its responsibilities. The NCTC serves as the central and shared knowledge-bank on known and suspected terrorists, and international terror groups, as well as their goals, strategies, capabilities, and networks of contacts and support. The NCTC ensures that agencies have access to and receive all-source intelligence support needed to execute their counterterrorism plans or perform independent, alternative analysis.

NATIONAL DISASTER MEDICAL SYSTEM (NDMS): A coordinated partnership between the federal Departments of Homeland Security, Health and Human Services, Defense, and Veterans Affairs, established for the purpose of responding to the needs of victims of a public health emergency. The NDMS provides medical response assets and the movement of patients to health care facilities where definitive medical care is received when required.

NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS): A system mandated by Homeland Security Presidential Directive (HSPD)-5 that provides a consistent nationwide approach for federal, state, tribal, and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents (which includes terrorist attacks, major disasters, and other emergencies), regardless of their cause, size, or complexity. To provide for interoperability and compatibility among federal, state, and local capabilities, the NIMS includes a core set of concepts, principles, and terminology. HSPD-5 identifies these as the incident command system, multi-agency coordination systems, unified command, training, identification, and management of resources (including systems for classifying types of resources), qualifications and certifications, and the collection, tracking, and reporting of incident information and incident resources. (Note: The Incident Management System [IMS] for the State Emergency Operations Center, as described in the Direction and Control ESF, is compatible with the NIMS as currently developed.)

NATIONAL INFRASTRUCTURE COORDINATION CENTER (NICC): A federal Department of Homeland Security facility that monitors the nation's critical infrastructure and key resources on an ongoing basis. In the event of an incident, the NICC provides a coordinating vehicle to share information with critical infrastructure and key resources information-sharing entities.

NATIONAL INTERAGENCY FIRE CENTER (NIFC): A federal facility located in Boise, Idaho, that is jointly operated by several agencies and is dedicated to coordination, logistical support, and improved weather services in support of fire management operations throughout the United States.

NATIONAL MILITARY COMMAND CENTER (NMCC): The nation's focal point for continuous monitoring and coordination of worldwide military operations. The NMCC directly supports combatant commanders, the chairman of the Joint Chiefs of Staff, the Secretary of Defense, and the President in the command of U.S. armed forces in peace time contingencies and war. Structured to support the President and Secretary of Defense effectively and efficiently, the center participates in a wide variety of activities. The center alerts the Joint Staff and other national agencies to developing crises and will initially coordinate any military response required.

NATIONAL OPERATIONS CENTER (NOC): The primary national hub for domestic incident management, operational coordination, and situational awareness. The NOC is a standing, 24/7 interagency organization fusing law enforcement, national intelligence, emergency response, and private sector reporting. The NOC facilitates homeland security information-sharing and operational coordination with other federal, state, local, tribal, and nongovernmental EOCs. (Note: Previously called the "Homeland Security Operations Center" or HSOC.)

NATIONAL RESPONSE CENTER: A national communications center – located at the Department of Homeland Security / U.S. Coast Guard headquarters in Washington, DC – for activities related to oil and hazardous material substance response actions. The National Response Center receives and relays notices of oil and hazardous substances releases to the appropriate federal On-Scene Coordinator (OSC).

NATIONAL RESPONSE COORDINATION CENTER (NRCC): As a 24/7 functional component of the National Operations Center, the NRCC serves as the Department of Homeland Security/Federal Emergency Management Agency primary operations center responsible for national incident response and recovery as well as national resource coordination. The NRCC monitors potential or developing incidents and supports the efforts of regional and field components.

NATIONAL RESPONSE FRAMEWORK (NRF): The plan developed by the federal Department of Homeland Security (DHS) to replace the National Response Plan (NRP) which had been in effect since January 6, 2005. The National Response Framework officially replaced the NRP on March 22, 2008. The National Response Framework provides the guiding principles by which all response personnel prepare for and provide a unified national response to disasters and emergencies.

NATIONAL SPECIAL SECURITY EVENT (NSSE): A designated event that, by virtue of its political, economic, social, or religious significance, may be the target of terrorism or other criminal activity.

NONGOVERNMENTAL ORGANIZATION (NGO): A private nonprofit entity that is based on interests of its members, individuals, or institutions and that is not created by a government but may work cooperatively with government. Such organizations serve a public purpose, not a private benefit. Examples include faith-based charity organizations and the American Red Cross.

NON-PERSISTENT AGENT: An agent that upon release loses its ability to cause casualties after 10 to 15 minutes. It has a high evaporation rate and is lighter than air and will disperse rapidly. It is considered to be a short-term hazard. However, in small, unventilated areas, the agent will be more persistent. (Refer to the Weapons of Mass Destruction Attack Procedures for more detailed definitions of WMD agents.)

OVERPRESSURE: The pressure, usually expressed in pounds per square inch (psi), manifested in the shock (or blast) wave from a nuclear explosion. The variation of the overpressure depends on the energy yield of the explosion, the distance from the point of the blast, and the medium in which the weapon is detonated.

PERSISTENT AGENT: An agent that upon release retains its casualty-producing effects for an extended period of time, usually anywhere from 30 minutes to several days. A persistent agent usually has a low evaporation rate, and its vapor is heavier than air; therefore, its vapor cloud tends to hug the ground. It is considered to be a long-term hazard. (Refer to the Weapons of Mass Destruction Attack Procedures for more detailed definitions of WMD agents.)

PLUME: Airborne material spreading from a particular source; the dispersal of particles, gases, vapors, and aerosols into the atmosphere.

POINT OF DISTRIBUTION (POD): A facility operated by a local government, local church or other faith-based organization, community-based organization, or voluntary agency for providing needed commodities (donated and/or procured) directly to disaster victims. Also commonly called “Distribution Center”.

PORT OF ENTRY: The location designated in each state by the U.S. Department of Health and Human/Office of Refugee Resettlement (HHS/ORR) where repatriates will be transported for registration, evaluation, connection/reconnection with support services and systems, and onward transportation to their final destination. Michigan’s designated POE is Detroit Metropolitan Wayne County (DTW) Airport located in the City of Romulus in Wayne County. Michigan’s Emergency Repatriation Center (ERC) will be established at DTW Airport to process incoming repatriates.

PRELIMINARY DAMAGE ASSESSMENT (PDA): An assessment conducted by teams of federal, state, and local officials (and tribal, if affected) to determine the severity and magnitude of a disaster and also to identify capabilities and resources of state, local, tribal, and other federal agencies.

PREPAREDNESS: The range of deliberate, critical tasks and activities necessary to build, sustain, and improve the operational capability to prevent, protect against, respond to, and recover from domestic incidents. Preparedness is a

continuous process involving efforts at all levels of government and between government and private sector and nongovernmental organizations to identify threats, determine vulnerabilities, and identify required resources.

PREVENTION: Actions taken to avoid an incident or to intervene to stop an incident from occurring. Prevention involves actions taken to protect lives and property by applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations, heightened inspections, improved surveillance and security operations, investigations to determine the full nature and source of the threat, public health and agricultural surveillance and testing processes, immunizations, isolation or quarantine, and, as appropriate, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators and bring them to justice.

Note: Prevention is very similar to the traditional emergency management activity of hazard mitigation; however, prevention – as described in the NRF – focuses entirely on avoiding or preventing terrorist incidents whereas hazard mitigation focuses primarily on reducing the long-term risk to human life and property from other natural, technological, and human related hazards.

PRINCIPAL FEDERAL OFFICIAL (PFO): The federal official designated by the Secretary of Homeland Security to act as his/her representative locally to oversee, coordinate, and execute the Secretary's incident management responsibilities under HSPD-5. The PFO ensures consistency of federal support as well as the overall effectiveness of federal incident management. The PFO interfaces with federal, state, tribal, local, and nongovernmental/private sector officials regarding the federal incident management strategy and serves as the primary federal spokesperson for coordinating public communications related to the incident. The PFO position is normally only established for catastrophic or unusually complex incidents requiring extraordinary coordination.

PRIVATE SECTOR: Organizations and entities that are not part of any government structure. This includes for-profit and not-for-profit organizations, formal and informal structures, commerce and industry, and private voluntary organizations.

PROTECTION FACTOR (PF): A number used to express the relationship between the amount of fallout gamma radiation that would be received by a person in a completely unprotected location and the amount that would be received by a person in a protected location.

PROTECTIVE ACTIONS: Emergency measures taken to protect the population from the effects of a hazard. These may include in-place sheltering or evacuation, as well as specific measures aimed at protecting public health (e.g., vaccinations, agricultural embargoes, health advisories, etc.).

PROTECTIVE ACTION GUIDES (PAGs): Guides for protective action in the event of a nuclear incident based on the projected or committed dose values of individuals in the general population. Protective actions would be warranted provided the reduction in individual dose expected from these actions is not offset by excessive risks to safety in taking the protective actions.

RADIOLOGICAL MONITOR (RM): An individual trained to measure, record, and report radiation dose and dose rates; provide limited field guidance on radiation hazards associated with operations to which he/she is assigned and perform operator's maintenance of radiological instruments.

RADIOLOGICAL MONITORING: The procedure or operation of locating and measuring radiation by means of survey instruments that can detect and measure (by means of exposure rates) ionizing radiation.

RADIOLOGICAL RELEASE: 1) An airborne release of radiological contaminants in gaseous or particulate form. This release could be instantaneous in the form of a single cloud or "puff", or it could be a prolonged release or "plume". 2) A liquid release of radiological contaminants that flow into a waterway or other surface or sub-surface distribution system.

RECEPTION CENTER: A center established to register evacuees and assess their disaster-related needs. This facility may also, under certain circumstances, be used to receive specific commodities such as food, water, clothes, and building supplies.

RECOVERY: Emergency actions dedicated to the continued protection of the public and/or to promoting the resumption of normal activities in the affected area. Recovery involves the development, coordination, and execution of service and site restoration plans for impacted communities and the reconstitution of government operations and services through individual, private sector, nongovernmental, and public assistance programs that: 1) identify needs and define resources; 2) provide housing and promote restoration; 3) address long-term care and treatment of affected persons; 4) implement

additional measures for community restoration; 5) incorporate mitigation measures and techniques, as feasible; and 6) evaluate the incident to identify lessons learned.

RECOVERY PLAN: A plan developed by the state, with assistance from the affected local (and/or tribal) communities and responding federal departments/agencies, to restore an area affected by a disaster or emergency.

REGIONAL RESPONSE COORDINATION CENTER (RRCC): A standing facility at each FEMA regional office that is activated to coordinate regional response efforts and implement local federal program support until a Joint Field Office (JFO) is established.

REPATRIATION: The procedure where U.S. citizens and their families are officially processed back into the United States after an evacuation overseas. Evacuees are also provided various services to ensure their well-being and onward movement to their final destination.

RESOURCES: Personnel and major items of equipment, supplies, and facilities available or potentially available for assignment to incident operations and for which status is maintained. Resources are described by kind and type and may be used in operational support or supervisory capacities at an incident or at an EOC.

RESPONSE: Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of incident mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities may include but are not limited to: 1) applying intelligence and other information to lessen the effects or consequences of an incident; 2) increased security operations; 3) continuing investigations into the nature, source and magnitude of the threat; 4) ongoing public health and agricultural surveillance and testing processes; 5) immunizations, isolation or quarantine; 6) specific law enforcement operations aimed at saving lives, protecting property, isolating hazard areas, or preempting, interdicting, or disrupting illegal activity and apprehending actual perpetrators; 7) emergency medical activities; 8) fire control and suppression activities; 9) emergency protective measures such as stabilizing or blockading unsafe structures, taking expedient flood control measures, etc.; 10) search and rescue activities; and 11) providing for basic human needs through emergency sheltering and feeding operations.

RISK AREA: An area considered likely to be affected by a hazard.

ROBERT T. STAFFORD DISASTER RELIEF AND EMERGENCY ASSISTANCE ACT: (See “Stafford Act”)

SENIOR FEDERAL LAW ENFORCEMENT OFFICIAL (SFLEO): The senior law enforcement official from the department/agency with primary jurisdictional responsibility as directed by statute, Presidential directive, existing federal policies, and/or the U.S. Attorney General. The SFLEO directs incident-related intelligence and investigative law enforcement operations and supports the law enforcement component of the Unified Command on-scene. For terrorist incidents, this official will normally be the FBI Senior Agent-in-Charge (SAC).

SENIOR FEDERAL OFFICIAL (SFO): An individual representing a federal department or agency with primary statutory responsibility for incident management.

SHELTER: A facility in an area safe from the effects of a hazard that may be used to house and care for evacuees and disaster survivors.

SITUATIONAL AWARENESS: The ability to identify, process, and comprehend critical information about an incident. Situational awareness requires continuous monitoring of relevant sources of information regarding actual and developing hazards.

SPAN OF CONTROL: The number of individuals a supervisor is responsible for, usually expressed as the ratio of supervisors to individuals.

SPORE: A reproductive form some micro-organisms can take to become resistant to environmental conditions, such as extreme heat or cold, while in a “resting stage”.

STAFFORD ACT: The Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 100-707, signed into law November 23, 1988. The Stafford Act renamed and amended the Disaster Relief Act of 1974, P.L. 93-288. The Stafford Act was subsequently amended by the Disaster Mitigation Act of 2000, P.L. 106-390 (October 30, 2000), as well as

several Acts signed into law in October of 2006 (i.e., Department of Homeland Security Appropriations Act of 2007, P.L. 109-295, October 4, 2006; Pets Evacuation and Transportation Standards Act of 2006, P.L. 109-308, October 6, 2006; and Security and Accountability for Every Port Act of 2006, P.L. 109-347, October 13, 2006).

STAGING AREA: A large parking lot or other suitable open area to provide a base for registration, unloading and transfer of resources, assembly of persons, and a rally point for mutual aid forces. For incident response/recovery operational purposes, a staging area could be officially designated points such as vacant commercial lots, warehouse facilities, armories, county fairgrounds, highway/public works maintenance garages, airports, parks, and recreation areas, or possibly shopping center parking lots (providing there is written permission from the owner).

STATE COMMAND POST (SCP): A post established at or near the scene of an incident (or co-located/integrated with an established local or federal Command Post) and staffed by representatives of applicable state departments/agencies to coordinate state response activities.

STATE COORDINATING OFFICER (SCO): The person appointed by the Governor to manage all aspects of a federally-declared major disaster or emergency under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). The Division Commander or Assistant Division Commander of the Emergency Management and Homeland Security Division, Department of State Police (MSP/EMHSD) is normally appointed to this position.

STATE DEBRIS MANAGEMENT SYSTEM: The collection of personnel, facilities, technical expertise, and material resources which are designated to assist affected local governments in the clearance, removal, transport, sorting, storage, recycling, and ultimate disposal of disaster debris. The State of Michigan's debris management system consists of 1) the State Disaster Debris Management Team; 2) the State Disaster Debris Management Center; 3) required support facilities such as Staging Areas and the Base/Camps; and 4) the available material resources and expertise of involved state departments/agencies and nongovernmental organizations that can be devoted to debris clearance, removal, reduction, and disposal operations.

STATE DEBRIS MANAGER: The MSP/EMHSD or other state department/agency employee that is responsible for managing a debris operation on behalf of the State.

STATE DIRECTOR OF EMERGENCY MANAGEMENT AND HOMELAND SECURITY (SDEMHS): The Director of the Department of State Police or his/her authorized representative. The Division Commander of the Emergency Management and Homeland Security Division, Department of State Police (MSP/EMHSD) is the designated Deputy State Director of Emergency Management (DSDEM) for emergency management functions. The Bureau Commander of the Field Support Bureau, Department of State Police (MSP/FSB) is the designated Deputy State Director of Homeland Security (DSDHS) for homeland security functions.

STATE DISASTER DEBRIS MANAGEMENT CENTER: The facility established at or near the State Emergency Operations Center (SEOC) from which the debris management function is coordinated.

STATE DISASTER DEBRIS MANAGEMENT TEAM: Those state department/agency and nongovernmental organization representatives that are part of the State's debris management operation. Team members are involved in all phases of the debris management cycle, including planning and preparedness activities, as well as the response and recovery phases. (Also see "Debris Management Team")

STATE DISASTER LOGISTICS MANAGEMENT CENTER: The facility established at or near the State Emergency Operations Center (SEOC) from which the logistics management function is coordinated.

STATE DISASTER LOGISTICS MANAGEMENT COORDINATOR: The MSP/EMHSD or other state department/agency employee that is responsible for managing a logistics operation on behalf of the State.

STATE DISASTER LOGISTICS MANAGEMENT TEAM: Those state department/agency and nongovernmental organization representatives that are part of the State's logistics management operation. Team members are involved in all phases of the logistics management cycle, including planning and preparedness activities as well as the response and recovery phases. (Also see "Logistics Management Team")

STATE EMERGENCY OPERATIONS CENTER (SEOC): The primary center for coordination of state government response and recovery operations in time of disaster or emergency. The SEOC is maintained and operated by the MSP/EMHSD.

STATE EMERGENCY OPERATIONS CENTER (SEOC) DIRECTOR: The person who is the commander of the SEOC when it is activated. This is typically the Deputy State Director of Emergency Management (DSDEM), Commander of MSP/EMHSD, however someone delegated by the SDEMHS or DSDEM may fill this role.

STATE EMERGENCY MANAGEMENT COORDINATOR (EMC): The person appointed pursuant to Act 390, PA 1976, as amended, to coordinate emergency management activities for a state department. State Department Emergency Management Coordinators include representatives from the Executive, Judicial, and Legislative Branches of Michigan State Government. (Also see "Emergency Management Coordinator")

STATE HAZARD MITIGATION OFFICER (SHMO): The person appointed by the SCO to serve as the primary point of contact with FEMA, other federal and state departments/agencies, and local and tribal units of government in the planning and implementation of pre- and post-disaster hazard mitigation activities.

STATE HOMELAND SECURITY ADVISOR: The individual appointed by the Governor to serve as his/her counsel on homeland security issues and to serve as liaison between the Governor's office, the state homeland security structure, the federal Department of Homeland Security, and other governmental and nongovernmental organizations – both inside and outside of the state – that are involved in homeland security activities.

STATE INDIVIDUAL ASSISTANCE OFFICER (SIAO): The person appointed by the SCO to serve as the primary point of contact with FEMA, other federal and state departments/agencies, and private, voluntary (nongovernmental) agencies, and organizations in the provision of disaster relief assistance to individuals and families.

STATE LOGISTICS MANAGEMENT SYSTEM: The collection of personnel, facilities, technical expertise, and material resources which are designated to assist in the identification of need for, solicitation, procurement, storage, staging, registration/inventorying, transportation, distribution, and accounting of disaster commodities necessary to respond to and recover from disasters and emergencies. The State of Michigan's logistic management system consists of 1) the State Disaster Logistics Management Team; 2) the State Disaster Logistics Management Center; 3) required support facilities such as Warehouses, Staging Areas, the Base / Camps, and Points of Distribution; and 4) the available material resources and expertise of involved state departments/agencies and nongovernmental organizations that can be devoted to disaster logistics management operations.

STATE OF DISASTER OR STATE OF EMERGENCY: A declaration by executive order or proclamation by the Governor under the provisions of 1976 PA 390, as amended, which activates the response and recovery aspects of state and local emergency operations plans.

STANDARD OPERATING PROCEDURE (SOP): Detailed written procedures that are unique to a specific incident, hazard, condition, situation, or function, that are developed by a department/agency or organization to implement the tasks assigned in an emergency operations plan.

STATE PUBLIC ASSISTANCE OFFICER (SPAO): The person appointed by the SCO to manage the Public Assistance Grant Program on behalf of the State.

STRATEGIC INFORMATION AND OPERATIONS CENTER (SIOC): A Federal Bureau of Investigation (FBI) headquarters facility that serves as the focal point and operational control center for all federal intelligence, law enforcement, and investigative law enforcement activities related to domestic terrorist incidents or credible threats, including leading attribution investigations. The SIOC serves as an information clearinghouse to help collect, process, vet, and disseminate information relevant to law enforcement and criminal investigation efforts in a timely manner. The SIOC supports the FBI's mission in leading efforts of the law enforcement community to detect, prevent, preempt, and disrupt terrorist attacks against the United States.

TASK FORCE: Any combination of resources assembled to support a specific mission or operational need. All resource elements within a Task Force must have common communications and a designated leader.

TEMPORARY DEBRIS STORAGE AND REDUCTION (TDSR) SITE: A location where debris is temporarily stored until it is sorted, processed, reduced in volume and/or taken to a permanent landfill or other approved location. (Note: Also called "Debris Management Site", although TDSR Site is more commonly used.)

TERRORISM: An intentional, unlawful use of force, violence, or subversion against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political, social, or religious objectives.

TIERED RESPONSE: A key principle of the response doctrine from the National Response Framework that stresses that incidents must be managed at the lowest possible jurisdictional level and supported by additional capabilities when needed.

TOXICITY: A measure of the harmful effect produced by a given amount of a toxin on a living organism. The relative toxicity of an agent can be expressed in milligrams of toxin needed per kilogram of body weight to kill experimental animals.

TOXINS: A substance, produced in some cases by disease-causing micro-organisms, which is toxic to other living organisms. Toxins are produced by numerous organisms, e.g., bacteria, fungi, algae, and plants. Many of them are extremely poisonous with a toxicity that is several orders of magnitude greater than nerve agents. Since toxins have low volatility, they are dispersed as aerosols and then taken up foremost through inhalation.

TRAFFIC CONTROL POINTS: The points along evacuation routes that are staffed by police or other designated personnel to direct an evacuation.

TRIBAL: Any American Indian tribe, band, nation, or other organized group or community that is recognized as eligible for the special programs and services provided by the United States to American Indians because of their status.

UNAFFILIATED VOLUNTEER: Also known as a “spontaneous” or “emergent” volunteer; an individual who is not formally associated with a recognized voluntary disaster relief organization.

UNDESIGNATED GOODS: Largely unsolicited, donated items that are not addressed to a specific recipient.

UNIFIED COMMAND: An application of the Incident Command System (ICS) used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the Unified Command to establish their designated Incident Commanders at a single Incident Command Post (ICP) and to establish a common set of objectives and strategies and a single Incident Action Plan (IAP).

UNSOLICITED GOODS: Donated items offered by and/or sent to the incident area by the public, the private sector, or other source, that have not been requested by government or nonprofit disaster relief coordinators. (Note: the Michigan Disaster Donations Management Plan, MSP/EMHSD Publication 107 – a Support Plan to the Michigan Emergency Management Plan – addresses this and other donations management issues.)

VACCINE: A preparation of killed or weakened micro-organism products used to artificially induce immunity against a disease.

VALUE-ADDED DONATION: A disaster donation (goods or service) that has been properly prepared for shipping, receiving, distribution, and use. Generally, value-added donations are: 1) needed by the disaster-stricken community; 2) appropriate to the culture of the community; and 3) clearly sorted, packed, and labeled for distribution and eventual use. Perishable food is not a value-added donation and should be discouraged.

VOLUNTEER: For emergency management and/or homeland security purposes, any individual accepted to perform services by an appropriate governmental agency which has authority to accept volunteer services, when the individual performs services without promise, expectation, or receipt of compensation for services performed.

WAREHOUSE: Any available, large, enclosed storage area (ideally 25,000 – 200,000 square feet in size, located on a secured/fenced site) with sufficient area to park and unload trucks and other vehicles carrying disaster donations or commodities. Examples of facilities that can be used as warehouses include but are not limited to vacant commercial warehouse space, governmental and nongovernmental organization warehouse facilities, armories, county fairground buildings, ice arenas, highway/public works maintenance garages, airport hangers, community recreation centers, etc.

WARM ZONE: The contamination control area outside the "hot" zone around a hazardous material incident. (Refer to the Technological Disaster Procedures/Hazardous Material Incidents section for a diagram and narrative describing this concept.)

WEAPON OF MASS DESTRUCTION (WMD): Under Title 18, U.S.C. § 2332a, “(1) Any explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than four ounces, or missile having an explosive or incendiary charge of more than one-quarter ounce, or mine or similar device; (2) any weapon that is designed or intended

to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals or their precursors; (3) any weapon involving a disease organism; or (4) any weapon that is designed to release radiation or radioactivity at a level dangerous to human life." Weapons of Mass Destruction are also commonly referred to as "CBRNE" Weapons – an acronym for chemical, biological, radiological, nuclear, and explosives / incendiary devices.

YIELD: The total effective energy released in a nuclear explosion, usually expressed in terms of equivalent tonnage of TNT required to produce the same energy released in an explosion. The total energy yield is manifested as nuclear radiation, thermal radiation, and shock (blast) energy.

PLAN APPROVAL, MAINTENANCE, AND DISTRIBUTION

Approval

The Michigan Emergency Management Plan (MEMP) is prepared by the Michigan Department of State Police/Emergency Management and Homeland Security Division (MSP/EMHSD), in partnership with the departments, agencies, and organizations identified in the plan. This plan is developed and maintained by the MSP/EMHSD as required under 1976 PA 390, as amended (Michigan Emergency Management Act), MCL 30.407a. It has been approved by the Governor and State Director of Emergency Management and Homeland Security (SDEMHS) as being current and adequate for the State of Michigan, and all state departments and agencies are directed to follow the plan, to the extent practicable, when preparing for, responding to, and recovering from incidents, and providing relief assistance to local governments. The latest signed and updated copy of this plan supersedes all State of Michigan emergency response and operations plans promulgated prior to the publication of this plan.

Maintenance

The MSP/EMHSD maintains this plan and revises it when required by changes in internal or external conditions, in conjunction with involved partners and stakeholders. The plan is reviewed and updated as soon as practicable after changes are identified. At a minimum, this plan must be updated every other year for Emergency Management Performance Grant (EMPG) guidelines; all other plans are updated every four years (or with the change of Governor) per EMHSD internal policies. The MSP/EMHSD reviews the MEMP annually to determine if changes are required, and as needed updates the MEMP. Each partner department/agency and organization is responsible for reviewing their respective plan sections annually to certify completeness, currency, and accuracy and report, in writing, to MSP/EMHSD if there are changes required. Required changes identified must be reported to the MSP/EMHSD, in writing, by the department, agency, or organization Director or Emergency Management Coordinator (EMC) as soon as the need for change is identified. Yearly, State Emergency Management Coordinators (SEMCs) and other stakeholders review the MEMP and submit suggested changes through the Annual Planning Survey. The Governor and SDEMHS will review and approve the updated plan prior to its distribution.

Distribution

The MEMP is posted on the MSP/EMHSD web site for partners, stakeholders, and other interested parties to review and download. The MSP/EMHSD maintains email notification lists of representatives of departments, agencies, and organizations that are responsible for implementation of the task assignments contained within the plan, or that otherwise need a copy for operational or reference purposes. These representatives are notified by email when a revised plan edition is finalized, and web posted. The MSP/EMHSD provides hardcopy editions only to designated positions within the SEOC; all other stakeholders are required to use the electronic edition or print a hardcopy of the document themselves.

PLAN PURPOSE AND SCOPE

Purpose

The MEMP is a comprehensive all-hazards plan developed by the MSP/EMHSD in coordination with state agencies, whole community partners, and stakeholders. This plan is developed under the authority of the Emergency Management Act, PA 390, of 1976, as amended. This plan is the State of Michigan's organizational and operational framework to mitigate, prepare for, prevent, respond to, and recover from emergencies, disasters, threats, or incidents – actual, imminent, or potential – that could adversely impact the State of Michigan.

All disasters begin and end locally. In the State of Michigan, cities, villages, townships, and other local jurisdictions have the authority and responsibility to provide for the safety and welfare of residents under their jurisdiction. One way this is accomplished is through the assignment of a local emergency manager to all counties; further, municipalities with a population over 10,000 residents that choose to appoint an emergency manager may do so as well. Regardless of a declaration by the Michigan Governor, local elected officials or their emergency managers are expected to continue to lead the response and recovery efforts to the incident within their jurisdictions.

Overall, the purpose of this document is to provide for the framework to complete the five primary objectives of the state of Michigan emergency management system. (See "Emergency Management System"). The five primary objectives of this plan are:

- Protect the safety, health, and general wellbeing of Michigan's residents and visitors.
- Protect property and the environment to the maximum extent possible.
- Ensure that critical services can be provided in a timely and unencumbered manner.
- Facilitate the transition to recovery processes as outlined in both this document and the Michigan Recovery Support Plan.
- Provide emergency management policy for administration officials, SEMCs, and EMCs before, during, and after a disaster.

Scope
This plan addresses all activities related to the five mission areas of emergency management (detailed in FEMA's National Preparedness Goal 2015) with regards to all natural, technological, and human-related hazards occurring in or otherwise impacting the State of Michigan. This plan considers emergencies and disasters likely to happen in Michigan and describes the:

- Responsibilities delineated by state and federal law, regulation, administrative rule, executive order, and policy.
- Roles and responsibilities of state agencies and their relationship to local, county, tribal, federal, volunteer agencies, and private sector partners involved in emergency management.
- Functions and activities necessary to implement the National Preparedness Goal's five mission areas (See "NIMS Compliance").
- Sequences and processes that trigger systems, phases, and levels of emergency activation.
- Use of government, private sector, and volunteer resources during applicable incidents.
- Application of information collected or recorded, decisions made, and procedures developed in the planning process, during response, and in the after-action review following incident operations or training events.

KEY LEGAL AUTHORITIES

The MEMP complies with the Michigan Constitution of 1963, the Michigan Emergency Management Act, and other applicable State of Michigan and federal laws, policies, rules, and regulations (see partial list below). It is also consistent and compliant with the NIMS and EMAP standards, and generally adheres to Comprehensive Preparedness Guide 101 (CPG 101): Developing and Maintaining Emergency Operations Plans. The list of authorities below is not exhaustive and additional authorities may be referenced in individual support plans, annexes, or appendices.

Federal Government

- Public Law 81-920, as amended, the Federal Civil Defense Act of 1950
- Public Law 83-703, as amended, the Atomic Energy Act of 1954
- Public Law 93-288, as amended, the Robert T. Stafford Disaster Relief and Emergency Assistance Act
- The Cooperative Forestry Assistance Act, 16 U.S.C. §§ 2101-2114, of 1978
- Public Law 99-499, the Superfund Amendments and Reauthorization Act of 1986
- Public Law 106-390, the Disaster Mitigation Act of 2000
- Public Law 107-56, the USA Patriot Act of 2001
- Public Law 107-188, the Public Health Security and Bioterrorism Preparedness and Response Act of 2002
- Public Law 107-296, the Homeland Security Act of 2002
- The Animal Health Protection Act (AHPA), 7 U.S.C. 8310, of 2002
- The National Oil and Hazardous Substance Pollution Contingency Plan (NCP), 40 CFR § 300, of 2006
- Public Law 109-295, as amended, the Department of Homeland Security Appropriations Act of 2006
- Public Law 109-295, Post Katrina Emergency Management Reform Act (PKEMRA) of 2006
- Public Law 84-99, Flood Control and Coastal Emergencies Act of 2007
- The Economy Act, 31 U.S.C. §§ 1535-1536, of 2007
- The Restoration Act, 10 U.S.C. §§ 331-335, of 2007
- The Small Business Act, 15 U.S.C. §§ 631-651e, of 2007
- The Office of Federal Procurement Policy Act, 41 U.S.C. § 428a, of 2007
- Defense Against Weapons of Mass Destruction Act, 50 U.S.C. §§ 2301-2368, of 2007
- The Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675, of 2007
- The Public Health Services Act, 42 U.S.C. § 201, *et seq*., of 2007
- Medical Examiner Act 181 of 1953, Amended 1969
- Emergency Medical Services, Public Health Code Act 368 of 1978
- Mental Health Code, Act 258 of 1974
- Homeland Security Presidential Directive 3, Homeland Security Advisory System, March 11, 2002
- Homeland Security Presidential Directive 5, Management of Domestic Incidents, February 28, 2003
- Homeland Security Presidential Directive 7, Critical Infrastructure Identification, Prioritization and Protection, December 17, 2003
- Homeland Security Presidential Directive 8, National Preparedness, December 17, 2003
- Homeland Security Presidential Directive 15, United States Policy and Strategy in the War on Terror, March 2006
- Homeland Security Presidential Directive 20, National Continuity Policy, May 9, 2007
- Homeland Security Presidential Directive 21, Public Health and Medical Preparedness, October 18, 2007
- Presidential Decision Directive 39, U.S. Policy on Counterterrorism, June 21, 1995
- Presidential Decision Directive 62, Combating Terrorism, May 22, 1998

NOTE: A complete and detailed list of federal legal authorities including statues, regulations, executive orders, and Presidential directives are referred to with the National Response Framework and can be found on the FEMA website.

State Government

- Act 175, Public Acts of 1927, as amended, the Code of Criminal Procedure (new terrorism provisions)
- Act 328, Public Acts of 1931, as amended, the Michigan Penal Code (new terrorism provisions)
- Act 247, Public Acts of 2001, Interstate Emergency Management Assistance Compact; Equipment
- Act 248, Public Acts of 2001, Interstate Emergency Management Assistance Compact; Personnel
- Act 390, Public Acts of 1976, as amended, the Emergency Management Act (a.k.a., Michigan Emergency Management Act)
- Act 151, Public Acts of 1953, as amended, the Interstate Disaster Compact
- Act 202, Public Acts of 1959, the Emergency Interim Executive Succession Act
- Act 203, Public Acts of 1959, the Emergency Interim Local Succession Act
- Act 227, Public Acts of 1963, the Emergency Interim Judicial Succession Act
- Act 207, Public Acts of 1941, the Fire Prevention Act
- Act 368, Public Acts of 1978, as amended, the Michigan Public Health Code
- Act 191, Public Acts of 1982, the Declaration of State of Energy Emergency Act
- Act 245, Public Acts of 2020, an amendment to the 1978 Act 368 to include COVID-19 related response activities.
- Applicable Executive Orders and Executive Directives of the Governor

Local Government

- Applicable paragraphs, Act 390, Public Acts of 1976, as amended
- Act 102, Public Acts of 1999, the School Safety Information Act
- Local ordinances and resolutions

In addition to the legal authorities listed above, additional resources, articles, and guides are referenced throughout this document. These references are identified by a number which correlates to their reference found in the 'Sources' Appendix.

SITUATION AND ASSUMPTIONS

Situation

The MEMP may be activated for any emergency, disaster, threat, or incident –actual, imminent, or potential– that could adversely impact the State of Michigan. This plan is typically activated when:

- A coordinated response between multiple state agencies/departments and/or non-governmental organizations (NGOs) is required; and/or
- A significant public safety, health, and/or property protection issue is identified and requires state-level involvement and resolution.

Michigan's Hazard Analysis Summary

#MHA The Michigan Hazard Analysis (MHA), MSP/EMHSD Publication 103, identifies hazards that may pose a risk to the State of Michigan, and groups them into three general categories – natural, technological, and human-related. Every hazard considered in the MHA is significant and may result in a local disaster or emergency or cause human casualties. The rankings of hazards are determined primarily upon the state's history following incidents, and estimated risks and vulnerabilities of hazards. Some potentially catastrophic events were prioritized based upon the intersection of their worst-case destructive potential, and their short- and medium-term likelihood. State rankings differ from national/global ones. Vulnerabilities and priorities can vary throughout different parts of the state. The table (Figure 1) on the following page identifies some of the highest priority hazards in the State of Michigan. Hazards which have disaster-specific annexes in the MEMP are **bolded**.

Figure 1: Summary of Michigan's Estimated Hazard Rankings

Note: Many hazard assessments are based upon a limited historical analysis and therefore their estimated rankings should be treated merely as rough estimates.

Type of Hazard	Priority	Reason
Floods	Top	Many damaging incidents: urban, riverine, and coastal; disruptive
Public health emergencies	Top	Major incidents involving water quality, PBB (1973), pandemic potential
Oil and gas pipeline incidents	Top	Billion-dollar Kalamazoo River event (2010), related concerns
Major fires or industrial incidents	Top	Dearborn plant explosion (1999), potential casualties and disruption
Invasive species	Top	Potential Asian Carp and agribusiness impacts, Emerald Ash Borer damage
Severe winds	Top	Regularly occurring incidents with serious damages, widespread impacts
Tornadoes	Top	Potential for extreme damage and massive casualties, though uncommon
Infrastructure failures	Top	Potential impacts and disruption from major blackouts, though uncommon
Extreme heat	Top	Potential for widespread human impacts, burden upon infrastructure
Cyber-attack	*	Potential economic, infrastructure, disruptive effects; global source of risk
Catastrophic incidents	*	Recent hurricane impacts and other potential national emergencies; supply risks
Nuclear attack	*	Potential for terrorist device; potential from geopolitical strife
Terrorism and similar incidents	*	Recent U.S. incidents, 2012 sniper, 2009 airline incident, 1927 Bath School event
Hazardous materials incident (site)	High	Many events of local concern occur frequently; potential for serious events
Hazardous materials transportation	High	Many events of local concern occur frequently; potential for serious events
Ice storms	High	Michigan's most damaging winter hazard; infrastructure/transportation breakdowns
Major transportation accidents	High	A pattern of major interstate crashes, 1987 plane crash near Detroit
Hail	High	Strong events, although uncommon, have been as costly as tornadoes
Wildfires	High	Long wildfire history; some large-scale emergency events, potential casualties
Extreme Cold	High	Causes human casualties, infrastructure failures, and some other disruptions
Drought	High	Huge historical impacts might again be felt; agriculture's importance in Michigan
Dam failures	High	Severe potential impacts upon selected locations; costly environmental risks
Great Lakes shoreline hazards	High	High lake levels, harmful algal blooms, casualties from dangerous currents
Lightning	High	More casualties than many hazards, but trickier to mitigate; needs awareness
Subsidence	*	Imminent need to assess Western U.P. risks; an increase in urban subsidence
Space weather	*	A strong geomagnetic storm could cause widespread infrastructure failures
Civil disturbances	*	Recent U.S. incidents, multiple historical events within Michigan
Energy emergencies	*	Currently an interagency priority, but closer to preparedness than mitigation
Snowstorms	Medium	Annual events in each part of Michigan, transportation risks; limited damages
Scrap tire fires	Medium	Multiple past events, but tire quantities have been greatly reduced in recent years
Earthquakes	Medium	Unclear risks in Western U.P. subsidence zones; potential infrastructure loss
Nuclear power plant accidents	Medium	Events are rare, most are not severe, few facility locations, extensive preparedness
Oil and gas well accidents	Medium	Disaster events are rare; usually limited to one site or small area
Celestial impacts	Medium	Catastrophic impacts are very rare; shorter-term risks tend to be limited
Fog	Medium	Problematic for transportation; the worst direct impacts involve freezing fog

* The hazards marked with an asterisk are especially difficult to assess.

Michigan Profile

Michigan is 58,216 square miles and has a population of approximately 10.2 million people. Its 83 counties include numerous urbanized areas, including Metropolitan Detroit. Most Michigan residents live within these urbanized areas, which are mainly located in the southern portion of the State. Michigan is completely covered by local, incorporated government entities. This constitutes a general political and taxation structure for Michigan's many communities. Additional districts overlay these areas as well, such as school districts, village boundaries, congressional districts, and special assessment districts.

Michigan is geographically divided into the Lower and Upper Peninsulas. The Lower Peninsula accounts for approximately 70 percent of Michigan's total land area. The two peninsulas are separated by the Straits of Mackinac. The southern half of the Lower Peninsula is a level to gently rolling surface, where hills rising to elevations between 1,000 and 1,200 feet. (Lakes Michigan and Huron average about 577 feet above sea level.) The northern half of the Lower Peninsula has higher elevations, with hilly belts reaching elevations of 1,200 to 1,700 feet. The eastern half of the Upper Peninsula is relatively level and often swampy. The western half is higher and more rugged. Michigan has borders on four of the five Great Lakes and has the longest shoreline of any inland state—about 3,200 miles. Michigan also has over 10,000 inland lakes and 36,000 miles of streams.

Michigan has a diversified economy based on agriculture, manufacturing, tourism, services, and professional trades. More automobiles and trucks are produced in Michigan than in any other state. Michigan is the nation's top producer of office furniture, a major source of information technology and software, and a national leader in machine tools, chemicals, and plastics. Michigan is also one of the nation's leading agricultural producers. Michigan has a well-developed, multi-modal transportation system that supports the state's diversified economic activities. The highway system consists of a network of interstate, federal, state, and local routes that connect Michigan communities to major metropolitan areas and economic markets around the country. Michigan has 19 airports that offer commercial passenger jet service to major domestic and international destinations. Freight railroad lines link Detroit and other metropolitan areas such as Chicago and other major manufacturing and business centers in the United States and Canada. Michigan also offers 40 Great Lakes ports to facilitate waterborne commerce. Each year, Michigan's transportation system helps move 240 million tons of cargo by truck, rail, air, and ship. Michigan currently has four land-based international points of entry with Canada located in Detroit (Windsor Tunnel and Ambassador Bridge), Port Huron (Blue Water Bridge), and Sault Ste. Marie (Sault Ste. Marie Bridge), which accommodate both commercial and personal transportation, travel, commerce, and immigration. Sault Ste. Marie also maintains an international waterway on Lake Superior on the St. Mary's River with Canada through the Soo Locks.

Persons with Access and Functional Needs

#AFN The MEMP Evacuation and Mass Shelter Support Plan includes a section that addresses populations with access and functional needs during evacuation and mass shelter operations. Attached to that Support Plan is a table with populations with access and functional needs estimates, by county and municipal emergency management program jurisdiction (under 1976 PA 390, as amended). Included in that table are the following populations:

- Individuals with disabilities (with physical and/or sensory disability).
- Low-income individuals (below poverty line).
- Non-English-speaking and Limited English Proficient (LEP) individuals.
- Children (five years and under).
- Elderly individuals (65 years and older).
- Transportation disadvantaged individuals (without a vehicle).
- Homeless individuals.
- Institutionalized individuals (correctional facility, nursing homes, long term care facilities, juvenile facility, other).
- Individuals utilizing durable medical equipment.
- Individuals with hearing loss (deaf and hard of hearing).

Capability Assessment

#THIRA The SOM conducts assessments through the THIRA every three years to identify the state's most catastrophic threats and hazards and establishes capability targets to manage them. The Stakeholder Preparedness Review (SPR) is prepared annually and serves as a self-assessment of the state's capability levels measured against the targets established in the THIRA used to analyze how the capability gaps have changed from the prior year, and what factors impacted any changes (See "THIRA and SPR"). These capabilities are also assessed in every exercise (See "Training and Exercise"), following which improvement plans are created to address gaps identified during the exercise. Further, in real life incidents the Lessons Learned Advisor (LLA) in the Michigan SEOC facilitates the After-Action Report (AAR) Review and Improvement Planning (IP) process, which identifies areas for improvement during the response and recovery, which are then reviewed to find the best method to address gaps (see "SEOC Operations").

Mitigation Overview

#MHMP The Michigan Hazard Mitigation Plan (MHMP), MSP/EMHSD Pub. 106, provides the foundation and framework for hazard mitigation activities within the State of Michigan. The MHMP builds upon the MHA and incorporates mitigation into a broad framework of interagency and interdisciplinary coordination in order to reduce or eliminate long run risks that are present before, during, or after incidents. The plan seeks to integrate hazard mitigation activities, programs, capabilities, and actions into normal, day-to-day governmental and private sector functions and business management practices. This includes consideration of land use and comprehensive planning activities, emergency management mission areas, and military and homeland security considerations. The MHMP meets requirements as set forth in the federal Disaster Mitigation Act of 2000 (and in subsequent regulations and FEMA policies). The hazards identified in the MHA, and the mitigation measures identified and expanded upon in the MHMP, help to inform the MEMP's disaster-specific annexes as well as the mitigation activities which may be noted in various ESFs (although the MEMP is an all-hazards document).

Planning Assumptions

The following assumptions guide the development and implementation of this plan. Further function-specific planning assumptions in various support plans may be related specifically to the functions addressed in those plans.

- Most incidents have little or no notice. The response and recovery sections of this plan may be implemented in the recovery or immediate response phases of an incident due to the short notice.
- The successful implementation of this plan requires the cooperation of all plan stakeholders.
- Populations with access and functional needs are especially vulnerable in catastrophic incidents and will require specialized and particular attention in response and recovery for appropriate assistance.
- Many of those in Michigan affected by an incident will not be prepared for self-sufficiency for more than 72 hours, if that; this underlines the need for appropriate response and recovery operations as prescribed in the MEMP and local Emergency Operations Plans (EOPs)/ Emergency Action Guides (EAGs).
- Affected local jurisdictions should implement response and recovery operations from their local applicable EOP/EAGs in response to the incident; generally including the declaration of a local state of emergency or disaster when local resources are threatened to become overwhelmed.
- When requesting a Governor's declaration of emergency or disaster, the local jurisdiction(s) should demonstrate that the incident is widespread and severe; adversely impacts public health, safety, and welfare; negatively impacts the community; and requires specific assistance not currently available to the local jurisdiction through available mutual aid and resources. For more information see "Response Procedures".
- State level response and recovery efforts must be rapid, well organized, and well publicized to ensure minimal impact to the public health, safety, and welfare, and that public confidence in the state government remains high.
- The MEMP is a guidance which reflects activities which are always in action. The decision to implement the MEMP's response and recovery operations is made by the Governor, SDEMHS, Deputy State Director of Emergency Management (DSDEM), or other designee.
- In accordance with the *Michigan Continuity of Operations (COOP), Publication 110;* and *Michigan Continuity of Government Plan (COG), Publication 110a*; the three branches of Michigan State Government will continue to provide critical services to Michigan residents to the extent possible.
- Regional or national incidents may limit Michigan's ability to draw on federal resources.
- An incident which remains widespread, severe, and/or catastrophic after response and recovery operations described in the MEMP, may result in a request for a federal declaration of emergency or major disaster under the Stafford Act. (See "Obtaining Federal Assistance".)
- Some state level departments/agencies require a state declaration of emergency or disaster to mobilize resources.
- In anticipation of a catastrophic incident, FEMA may pre-stage resources at designated locations to ensure the rapid distribution of life-sustaining commodities and/or other assistance to Michigan's residents in the immediate aftermath of an incident.

Logistics Support and Resource Requirements for Plan Implementation

The implementation of the MEMP is dependent up on the logistical support for various facilities, agencies, departments, and organizations. Some of the logistical support required will be dependent upon the particulars of the incident including but not limited to:

- The nature, scope, and severity of the incident.
- The anticipated duration of the incident recovery.
- The presence of problems or conditions which the State is uniquely qualified to address and/or is legally required to address.
- The need for ongoing technical and/or materiel assistance to aid recovery.
- The need to coordinate and monitor the recovery activities of multiple agencies and organizations.
- The activation of federal or state recovery programs which require state-level management and oversight.

In most incidents requiring the implementation of the MEMP, facilities that may require logistical support may include:

- The SEOC.
- One or more local EOCs.
- Various Incident Command Posts (ICPs).
- Agency or Department specific Emergency Coordination Centers (ECCs).
- Technical support facilities such as labs.

These facilities are generally sourced through a government agency, department, or organization, or through a public or privately owned university. In extreme cases, private sector facilities may be used. Additional external support facilities and logistical support may be needed depending on the incident. The SEOC Logistics Section, in coordination with partners, is responsible for coordinating these facilities, which may include but are not limited to:

- (Commodity) Points of Distribution.
- State Staging Areas.
- Temporary Warehouses.
- Volunteer Reception Centers (VRCs).
- Donations Management Centers.
- Disaster Recovery Centers (DRCs).
- Multi Agency Resource Centers (MARCs).
- Federal facilities.
- NGO facilities.
- Family Reunification Centers.
- Family Assistance Centers.
- Friends and Family Reception Centers.
- Congregate Care Sites.

These additional logistical support sites may be sourced through government agencies, departments, organizations, or through public or privately owned universities, private sector agencies, or NGOs. When possible, all resources required for the MEMP's implementation will be sourced from the existing state departments, agencies, and organizations' stockpiles and capabilities. When unable to use existing stockpiles and capabilities, additional resource needs can be procured using the department, agency, or organizations' existing procurement procedures; or federal agency resource request processes (when response needs rise to a presidential declaration level).

Logistical support will be provided through the SEOC Logistics Section as described in ESF 7. The *Michigan Disaster Logistics Management Plan* Publication (TBD) supports, clarifies, and elaborates on the ESF 7, and may be activated in a large and complicated incident. The *Michigan Disaster Logistics Management Plan* describes how resource management, donations management, and mutual aid are operated and coordinated. The *Michigan Distribution Management Plan* Publication (TBD) is also a support plan to ESF 7 and describes how the SEOC supports emergency supply chains and coordinates the distribution of commodities during a disaster.

If additional state financial resources are required to implement the MEMP, federal financial and/or material support of recovery functions will be managed by the MSP/EMHSD and other recipient state agencies in accordance with the appropriate federal laws, rules, and regulations. (See ESF 5 and applicable Supporting State Plans).

Resources required for MEMP implementation and delivery of assistance to affected individuals and communities are coordinated through the SEOC. These resources for plan implementation exclude resources available in steady-state operations; resources available in steady-state operations will be coordinated through their respective agency, department, or organizations' steady-state procedures.

Mutual Aid: EMAC, NEMAC, MEMAC
#EMAC The MSP/EMHSD administers and may use the intrastate Michigan Emergency Management Assistance Compact (MEMAC) to secure resources to support disaster response. The MSP/EMHSD may also coordinate with other states (or Canadian provinces) for the provision of assistance under the interstate Emergency Management Assistance Compact (EMAC), the international Northern Emergency Management Assistance Compact (NEMAC), and/or other aid-providing organizations for assistance (compensated or uncompensated) under separate aid agreements. Material support provided through the EMAC will be managed by the MSP/EMHSD in accordance with established EMAC procedures and processes. Other partnerships of mutual aid may be offered including the nursing compacts with other states (some expanded upon during the 2020-2022 COVID-19 pandemic), and various other Great Lakes Homeland Security Partnerships. As appropriate, the MSP/EMHSD will contact and coordinate with FEMA and other involved federal agencies for the purpose of obtaining supplemental assistance under the NRF, the federal Stafford Act, or other mechanisms.

Donations Management
Some resources and goods can be provided through uncompensated donations of goods and services. These donated goods and services may come from various private sector organizations, individuals, the public sector, or various non-profit and community-based organizations. In extreme circumstances, the Governor has the authority under 1976 PA 390, as amended, MCL 30.405 to “commandeer” private property (subject to appropriate compensation) if necessary to effectively respond or recover from an incident.

Volunteers Management
Volunteer management does not fall within the scope of Logistics; however, volunteers may support many logistical and tactical operations. In ESF 6, volunteer management and operations are briefly described. For more information on the organization, management, tracking, and financial administration of volunteers see the *Michigan Volunteer Management Plan Publication* (TBD) (not published as of 2022).

Training and Exercise

The MSP/EMHSD training, exercise, and planning staff work closely to ensure plans, policies, procedures, and guides are trained and exercised in a timely, accurate, and effective manner. Training is developed based upon plans, polices, and procedures which are tested through the objectives of upcoming exercises. The outcomes of the exercises are then used to update those same plans, polices, and procedures with the lessons learned utilizing after action reports and suggestions from players, controllers, and the exercise team. This cycle of plan creation, training, exercising, and updating is reflective of the Homeland Security Exercise and Evaluation Program (HSEEP) guidance. In MSP/EMHSD the Training, Exercise, and Planning Units, plus invited subject matter experts and guests meet in the Training Exercise Planning Workshop (TEPW) at least once a year. At the TEPW, a coordinated multi-year plan to train on, exercise, and then update relevant plans, policies, procedures, and guidance is created through the collaborative efforts of partners and stakeholders.

Components of the MEMP are exercised at least yearly, and the annual exercise may evaluate all or part of the plan as deemed appropriate by the MSP/EMHSD. Many factors influence exercise frequency including current operational conditions, federal and state exercise requirements, financial resources, availability of personnel, and competing priorities, among many others. Most functional elements of the MEMP are at a minimum exercised annually as part of federally required radiological emergency preparedness exercise requirements, homeland security and/or catastrophic incident exercise initiatives. Results of these exercises are evaluated and any recommended or required changes to the MEMP are incorporated when appropriate to keep the plan current, relevant, and accurate. Examples of recent exercises which test the MEMP include:

Exercise Name	**Date**
Vibrant Response 2019 Exercise	2019-4-30 to 2019-5-1
Housing Tabletop Exercise	2019-9-20
Cyber Attack Functional Exercise	2019-11-13
Reunification Virtual Tabletop Exercise	2019-11-14
Burning Acres	2022-4-10

Training
The MSP/EMHSD training program consists of three main areas: emergency management training, the Professional Emergency Management (PEM) designation program, and the Hazardous Materials (HazMat) training for first responders. “The PEM designation provides a foundation level of knowledge and understanding of how emergency management

principles function in the state of Michigan and how local, state, non-governmental organizations, and the federal government cooperate before, during, and after an emergency or disaster" (Training and Exercise Guidebook 2021). This education on the Michigan emergency management system includes training on the MEMP. Further emergency management classes that may provide additional complex detail are built upon the foundations of emergency management identified through the PEM and MEMP. Additional training may be in response to or in support of upcoming exercises, planned events, changes based on lessons learned, or changes in plans, policies, procedures, or guides.

Exercise

The MSP/EMHSD exercises use best practices and HSEEP guidance to test the policies, procedures, plans, and guidance, after training on them has occurred. These exercises produce lessons learned which inform updates to the plans, policies, procedures, and guides. Updates can then be trained upon and exercised to create a cycle of continuous improvement. Increasingly complicated exercises build upon lessons learned and updates born from previous exercises. The exercise cycle shown here demonstrates this cycle.

Exercises are designed to engage players and strengthen their ability to deliver core capabilities necessary for life safety, scene stabilization, the protection of property and the environment, and recovery. Further exercises test plans, organizations, equipment, and training used to deliver needed core capabilities. Core capabilities which are identified as gaps through the THIRA/SPR process are tested and trained upon for growth, which is measured year-to-year through the same THIRA/SPR process.

Finance and Administration

In Michigan, finance and administration in emergency management and homeland security are largely grant-funded. The MSP/EMHSD administers multiple emergency management and homeland security grants for the state of Michigan. Collectively, the grants listed on the next page (Figure 2) provide funding to state and local governments and nonprofit agencies in Michigan. In addition, the MSP/EMHSD maintains and updates the State of Michigan (SOM) Administrative Plan for PAGP (Publication 005), and the SOM Administrative Plan for HMGP (Publication 007). (For more information on these documents please see the Support Plans and Procedures Section.)

In incidents where the SEOC is activated, the Finance Section Chief is co-lead for ESF 5: Planning and Information, and oversees the Finance Unit which identifies, tracks, and compiles incident-related costs. (See "SEOC Operations").

Figure 2: Non-Disaster Grants MSP/EMHSD Administers

Grant Name	**Action**
Emergency Management Performance Grant (EMPG)	Administered by the US Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA), the grant program provides funds to assist state, local, territorial, and tribal governments in preparing for all hazards
Hazardous Materials Emergency Preparedness Grant (HMEP)	Administered by the US Department of Transportation, Pipeline, and Hazardous Materials Safety Administration. Provides financial and technical assistance, as well as national direction and guidance to enhance state, territorial, tribal, and local hazardous materials emergency planning and training.
Homeland Security Grant Program (HSGP)	
State Homeland Security Program (HSGP-SHSP)	Administered by the US Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA), the grant program supports state, local, tribal, and territorial preparedness activities that address high priority preparedness gaps across all core capabilities that support terrorism preparedness.

Grant Name	Action
Urban Areas Security Initiative (HSGP-UASI)	Administered by the US Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA), the grant program assists high-threat, high-density urban areas in efforts to build, sustain, and deliver the capabilities necessary to prevent, protect against, mitigate, respond to, and recover from acts of terrorism.
Operation Stone Garden (HSGP-OPSG)	Administered by the US Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA), the grant program provides funding to support joint efforts to secure the United States borders along routes of ingress from international borders, to include travel corridors in states bordering Mexico and Canada, as well as states and territories with international water borders.
Nonprofit Security Grant Program (NSGP)	Administered by the US Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA), the grant program provides funding support for physical security enhancements and other security related activities to nonprofit organizations that are at high risk of a terrorist attack.

Following the declaration of disaster or emergency by the Governor, the Finance and Administration Section becomes critical in determining the applicability of funding through the Michigan Emergency Management Act, Public Act 390 of 1976 as amended, under Section 18 or Section 19 (See “Section 19” or “Section 18” for more information). Further, if the President grants a declaration of disaster or emergency, the Finance and Administration Section is integrated into the appropriate distribution of funding (as requested) and reviews applicability of costs for reimbursement.

Support Plans and Procedures

The MSP/EMHSD develops and maintains support plans and procedures that provide additional incident or objective-specific procedures, tasks, or systems. These plans and procedures are reviewed annually and updated by the MSP/EMHSD when significant changes have occurred. Support plans are generally updated on a four-year schedule, as conditions and resources allow. See Appendix I: State Support Plan List and Descriptions for a list of plans and procedures developed and maintained by the MSP/EMHSD. Other government agencies and NGO partners develop and maintain their own support plans and procedures, with their own update schedules, independent of the MSP/EMHSD.

EMERGENCY MANAGEMENT SYSTEM

THREAT HAZARD IDENTIFICATION AND RISK ANALYSIS (THIRA) AND STAKEHOLDER PREPAREDNESS REVIEW (SPR)

#THIRA The State of Michigan conducts a Threat and Hazard Identification and Risk Assessments (THIRA) every three years. Threats and hazards identified in the *Michigan Hazard Analysis* (MHA) (MSP/EMHSD Publication 103) are used to create scenarios which estimate core capability needs. The core capability needs estimated through the scenario in the THIRA are compared to the current core capabilities which have been exercised or utilized in real life incidents. The results from the THIRA process are used in the annual SPR, which captures progress and identifies the gaps in Michigan's capabilities. The SPR links each of the identified gaps to Planning, Organization, Equipment, Training, or Exercise (POETE) Area. These two FEMA processes help to identify the core capabilities which are required to prepare for, respond to, and recover from, likely threats and hazards in Michigan; as well as identify current capabilities and estimate the gaps between needed and current core capability capacities.

In the MEMP, the ESFs are used to organize tasks, which are linked to core capabilities and grouped by mission area. The annual SPR processes is used by the ESFs to can examine the delivery of the core capabilities linked to the ESF to determine if there has been improvement, sustainment, or loss of that capability over the previous year.

Michigan Hazard Analysis and Michigan Hazard Mitigation Plan

#MHA, #MHMP The MHA (MSP/EMHSD Publication 103) and *Michigan Hazard Mitigation Plan* (MHMP) (MSP/EMHSD Publication 106) are plans which directly inform the THIRA/SPR process. The MHA identifies and analyzes the potential for over 30 natural, technological, and human-made hazards, and emergency situations potential in Michigan. The MHMP addresses some of these and other identified threats, hazards, and emergencies and their appropriate mitigation measures. From these identified hazards, threats, and potential emergencies, probable scenarios which may be used to measure Michigan's core capabilities capacities are developed.

The MEMP addresses individual threats and hazards identified in the MHA and the appropriate response activities in the Disaster-specific Procedures appendix. These threats/hazards identified are addressed in separate appendices because of their unique nature, complexity, or additional compounding factors. Some hazards not addressed in separate appendices can be addressed through the MEMP's all-hazards tasks under the ESFs, and some hazards do not represent a direct threat to the health and safety of residents, and/or property. Those hazards which do not represent a direct threat can have cascading or external impacts which may pose a threat to the health and safety of residents, and/or property.

Figure 3: Mission Area/ Core Capability #CC

<table>
<tr><th>Prevention</th><th>Protection</th><th>Mitigation</th><th>Response</th><th>Recovery</th></tr>
<tr><td colspan="5">Planning</td></tr>
<tr><td colspan="5">Public Information and Warning</td></tr>
<tr><td colspan="5">Operational Coordination</td></tr>
<tr><td colspan="2">Intelligence and Information Sharing</td><td rowspan="4">Community Resilience
Long-term Vulnerability Reduction
Risk and Disaster Resilience Assessment
Threats and Hazards Identification</td><td colspan="2">Infrastructure Systems</td></tr>
<tr><td colspan="2">Interdiction and Disruption</td><td rowspan="3">Critical Transportation
Environmental Response/Health and Safety
Fatality Management Services
Fire Management and Suppression
Logistics and Supply Chain Management
Mass Care Services
Mass Search and Rescue Operations
On-scene Security, Protection, and Law Enforcement
Operational Communications
Public Health, Healthcare, and Emergency Medical Services
Situational Assessment</td><td rowspan="3">Economic Recovery
Health and Social Services
Housing
Natural and Cultural Resources</td></tr>
<tr><td colspan="2">Screening, Search, and Detection</td></tr>
<tr><td>Forensics and Attribution</td><td>Access Control and Identity Verification
Cybersecurity
Physical Protective Measures
Risk Management for Protection Programs and Activities
Supply Chain Integrity and Security</td></tr>
</table>

National Response Framework, Third Edition; FEMA

Figure 4: ESF/Core Capability Crosswalk #CC

	Critical Transportation	Operational Communications	Infrastructure Systems	Environmental Response/Health and Safety	Logistics and Supply Management	Fatality Management	Mass Care Services	Mass Search and Rescue Operations	Fire Management and Suppression	Situational Assessment	Planning	Public Information and Warning	Public Health, Healthcare, and Emergency Management Services	On Scene Security, Protection, and Law Enforcement
1 Transportation	x													
2 Communication		x												
3 Public Works and Engineering	x		x	x	x	x	x	x						
4 Fire Fighting		x	x						x	x				
5 Information and Planning										x	x	x		
6 Mass Care	x				x	x	x						x	
7 Logistics	x	x	x		x		x							
8 Public Health and Medical	x			x	x	x	x					x	x	
9 Search and Rescue								x						
10 Oil and Hazardous Materials	x		x		x							x		
11 Agriculture and Natural Resources	x		x	x	x		x						x	
12 Energy			x	x						x				
13 Public Safety														x
14 Cross-Sector Business and Infrastructure														
15 External Affairs												x		

Not all Core Capabilities are found in the ESFs in this document due to their connection with mission areas that are not explored in depth in the MEMP. The MEMP focuses on the Response mission area, which these Core Capabilities are a part of. The Core Capabilities in the Prevention, Protection, Mitigation, and Recovery Mission Areas may not be included in the MEMP but may be found in another document.

EMERGENCY MANAGEMENT SYSTEM DESCRIPTION

Overall, the emergency support function (ESF) framework is utilized to deliver core capabilities which accomplish the primary objectives of the State of Michigan emergency management system:

1. Protect the safety, health, and general wellbeing of Michigan's residents and visitors. (Life safety)
2. Protect property and the environment to the maximum extent possible. (Protection of property and the environment)
3. Ensure that critical services can be provided in a timely and unencumbered manner. (Incident stabilization)
4. Facilitate the transition to recovery processes as outlined in both this document and the Michigan Recovery Support Plan. (Facilitation of whole community recovery)
5. Provide emergency management policy for administration officials, SEMCs, and EMCs before, during, and after a disaster.

Disasters and emergencies require prompt and effective responses to ensure the accomplishment of the State of Michigan's primary incident objectives. To facilitate the swift and effective response to any incident, government agencies at all levels – local, state, tribal, and federal – create the framework for the State of Michigan emergency management system. This system utilizes the ICS, which often differs from the regular operations of government agencies/departments. This may require state agencies/departments to realign their structures and activities in incident response and recovery operations. To accomplish this, specialized teams or units may be formed to perform identified tasks that support the State of Michigan's primary incident objectives. Individuals on these specialized teams and units may be removed from their regular assignments in times of disaster or emergency.

Partner organizations, NGOs, Voluntary Organizations Active in Disaster (VOADs), contracted organizations, and other stakeholders may be activated to assist in response and recovery to an incident. To ensure a coordinated response these private, non-governmental, or volunteer partners may be engaged to assist and support local, state, tribal, or federal partners and are integrated into the ICS utilized by government responders. In this document, many private and public sector partners are embedded into various ESFs.

When an incident overwhelms local, state, and/or tribal governments' response and recovery efforts, and has exhausted private sector partner capabilities, the federal government may become involved upon request. (See "Obtaining Federal Assistance")

Local Framework

The local emergency management system is predicated on the assumption that all disasters begin and end locally. Each county has an appointed EMC and enabling legislation creating an emergency management program. In accordance with the provisions of the Michigan Emergency Management Act, Public Act 390 of 1976, as amended, municipalities with a population of 10,000 or more may have also elected to appoint an EMC, while those municipalities (or public college/university) with a population over 25,000 shall appoint an EMC. For additional clarification see Public Act 390 of 1976. A jurisdiction must have an appointed EMC and meet certain MSP/EMHSD requirements to be recognized as an emergency management program. Local EMCs serve at the direction of their jurisdiction's chief executive for all matters relating to preparedness, response, recovery, and mitigation. Local EMCs work closely with their local emergency response partners and their MSP/EMHSD District Coordinators. These local EMCs often coordinate closely not only with the local first responders, elected officials, and voluntary, non-profit organizations, but also with District Coordinators assigned from the MSP/EMHSD.

A District Coordinator (DC) is assigned to each of the eight MSP/EMHSD districts in the state (see Figure 5 below) and acts as liaison between the MSP/EMHSD and the local emergency management programs. The MSP/EMHSD District Coordinator provides day-to-day administrative and technical support to local emergency management programs. The emergency management system is based on coordination between local emergency management programs, appointed state department EMCs, and the MSP/EMHSD. All mission areas of hazardous activities are addressed via recognized single point of contact channels – most of them through the District Coordinator.

State Framework

The Director of the Michigan State Police (MSP) serves as the State Director of Emergency Management and Homeland Security (SDEMHS). Within the MSP, the Emergency Management and Homeland Security Division's commander is the Deputy State Director of Emergency Management (DSDEM). The MSP/EMHSD staff are responsible not only for activating the State Emergency Operations Center (See "SEOC Operations"), but also for day-to-day operations at the state level of the emergency management system. These responsibilities include but are not limited to the management of FEMA Preparedness Grants (see "Finance and Administration"), training and exercises (see "Training and Exercise"), plan creation and maintenance at the state and local level, and outreach to the public, private sector, and partners.

#SEMC Each state department/agency/organization director may designate a representative as the SEMC for their department /agency /organization. In accordance with PA 390, if the director does not designate an SEMC, they must serve in that role. These SEMCs act as liaison and Subject Matter Expert (SME) for their department/agency/organization in the SEOC and in coordination with EMHSD in matters concerning emergency management and homeland security. During an incident, the SEMCs respond to the SEOC (or virtual SEOC) as designated or requested by the D/SDEM, and while there, the SEMC speaks for the department and their director in all activities occurring in the SEOC. It is critical that the SEMC is empowered by their director to make decisions and be informed of activities occurring in their organization in relation to the incident. (See “SEOC Operations”). If an agency is not represented in the SEOC, their department’s SEMC may be contacted to coordinate on their behalf. All divisions, agencies, and organizations under a department must know who their SEMC is.

Figure 5: Emergency Management and Homeland Security Districts (map)

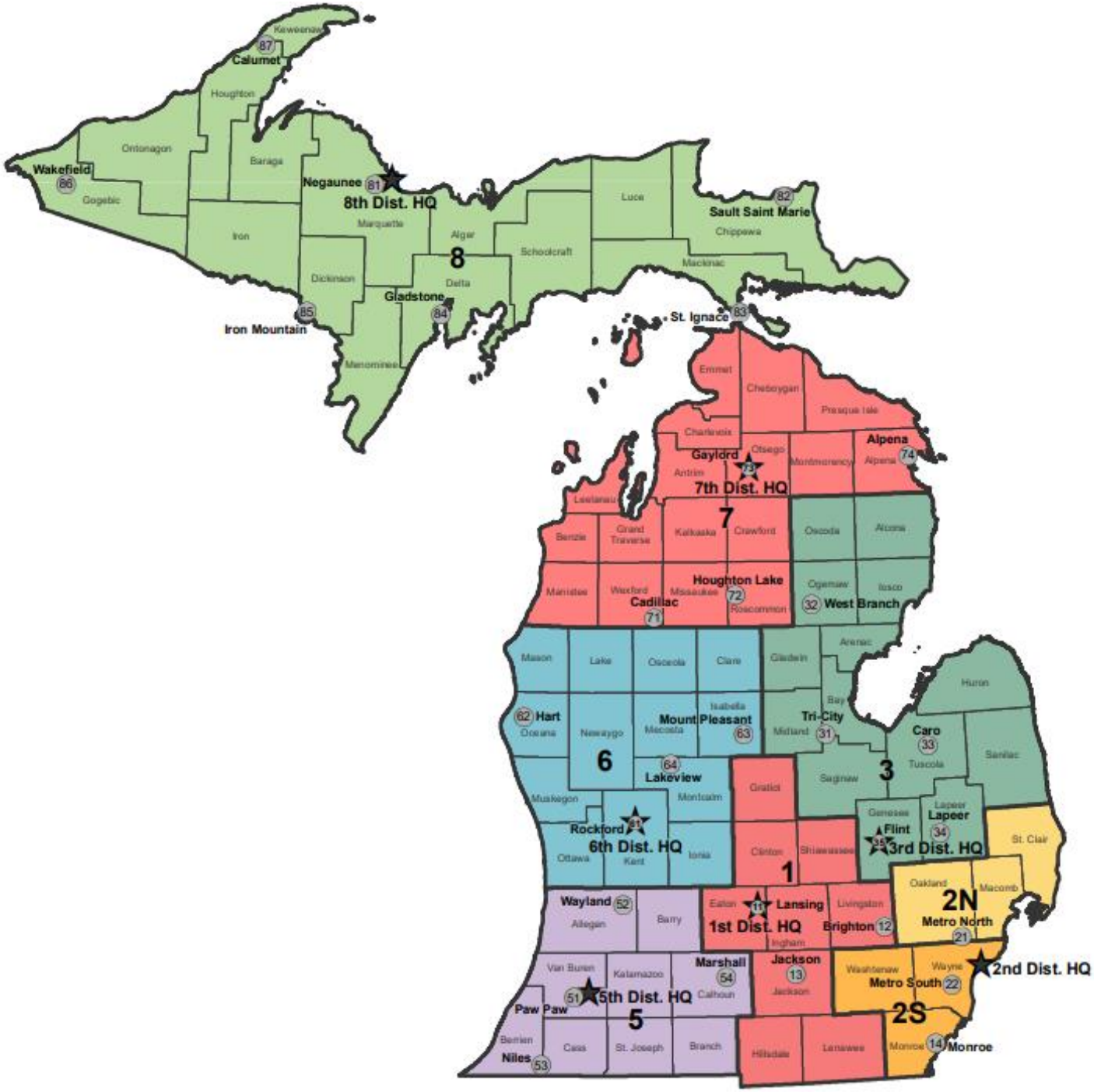
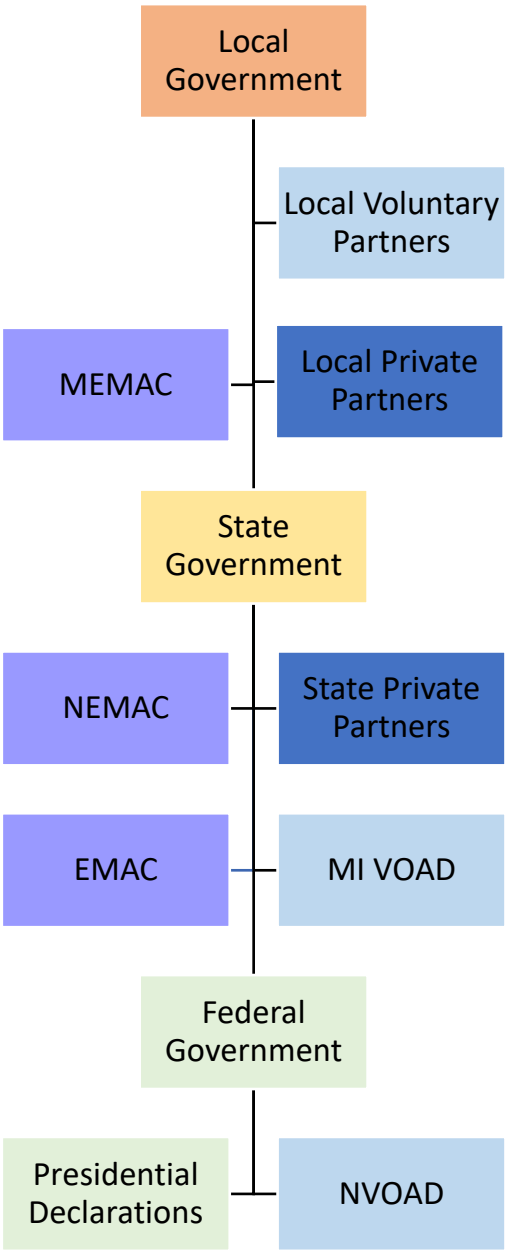


Figure 6: Supplemental Assistance Hierarchy for Incident Response / Recovery



All incidents begin and end locally, and as such the first responders to an incident are the local government. Local government will utilize local resources to the maximum extent before external assistance is requested. The local voluntary partners and private sector partners may be requested to assist in the local government response. If local resources are exhausted or specialized resources are required, mutual aid may be sought through the Michigan Emergency Management Assistance Compact (MEMAC) or existing mutual aid agreements.

If local resources are not sufficient to meet the incident needs, supplemental state assistance may be requested. State government assistance may include personnel, expertise, equipment, financial, and other assistance from state agencies. The state government may reach out to additional private sector partners or the Michigan Voluntary Organizations Active in Disaster (MI VOAD) for further assistance. If state resources are exhausted or specialized resources are needed, supplemental assistance may be requested through the NEMAC, or (with the addition of a state declaration of emergency or disaster) assistance may be requested through the EMAC.

If local, state, private sector, voluntary, and mutual aid assistance resources are not sufficient to meet the incident needs, supplemental federal resources may be provided under the Stafford Act and/or other authorities. The federal government may provide specific assistance under the Stafford Act (Presidential Declaration) and/or other authorities, or may utilize other resources from various other partners, including the National Voluntary Organizations Active in Disaster (NVOAD).

RESPONSE PROCEDURES

Local Response

#LOC When an incident occurs, first responders are usually the first officials on the scene. The first responders assess the situation and attempt to determine if there are additional needs beyond their capabilities. Depending on the size, scope, nature, and duration of the incident, additional departments/agencies may become involved. Generally, when an incident is of a size, scope, or nature which requires first and secondary responders the incident is sufficiently complex and large to require the local EMC's involvement. These incidents could include be natural disasters, terrorist attacks, threats to critical infrastructure or key resources and services, or incidents at pre-planned events. The local EMC is notified of the incident and monitors for escalation; in which case the local EOC may be activated to facilitate the coordination of multiple agencies/departments.

The EMC may also recommend that the chief executive of the county or municipality declare a local "state of emergency" under Act 390 of 1976, as amended, thereby activating appropriate response and recovery aspects of the local government. Local response procedures will be followed as stated in local EOPs/EAGs. The local MSP/EMHSD DC should be notified any time the EOC is activated; and in conjunction with the local EMC, they will assess the continued

needs for personnel, resources, equipment, and services in response to the incident. Needed personnel may include various response partners including but not limited to first responders, secondary responders, or private sector partners.

Sometimes a local EOC may activate before an incident occurs in anticipation of a predictable incident or event. The most common predictable disasters in Michigan are weather related (e.g., windstorms, heavy rainfall, extreme temperatures, etc.) and the local EOC may be activated in anticipation of an expected incident in order to pre-stage resources. Collaboration with the National Weather Service (NWS) and various event organizers is key to pre-planning and anticipating upcoming incidents and incident needs.

Request for State Assistance

#LOC If the jurisdiction chief executive determines the incident is beyond the control or scope of the local government, they may request the Governor declare a "state of emergency" or "state of disaster" under 1976 PA 390, as amended, and request state assistance in accordance with the provisions set forth in the act. The request for state assistance is signed by the chief executive official of the impacted jurisdiction and sent through the MSP/EMHSD DC to DSDEM headquarters in Lansing. The Governor will be notified of the request and given a recommendation from the MSP/EMHSD to approve or deny the request for a Governor's declaration of a "state of emergency" or "state of disaster". This recommendation is based upon a variety of factors including, but not limited to:

- The scope and severity of the incident.
- The actual, imminent, or potential negative impacts to public health, safety, and welfare.
    - Emergency vehicle access.
    - Public sanitation.
    - Fiscal impact. (Ability to provide emergency services such as police/ fire/ EMS)
    - Disruption/ curtailment of vital community services. (schools, human services, childcare, jails/prisons, public transportation)
    - Non-addressed dangers to the public. (hazardous trees, downed wires, holes/cracks in roadways, bridges out, debris piles, fire dangers, failing dams)
    - Environmental degradation.
- The impact on the community.
    - Physical destruction. (homes and businesses damaged, public facilities/ infrastructure damage, artificial drainage system damage, and the extent/anticipated duration of those damages)
    - Social disruption. (adverse impacts to populations with special needs, cancellation of community events)
    - Economic disruption. (lost business income, unemployment due to the incident, lost wages, economic impacts of cancelled community events)
    - Fiscal impact. (jurisdictional budget, required cutbacks in departments/ services, reduced ability to collect revenue)
    - Disruption/curtailment of vital community services. (adverse impacts to populations with special needs, reduced quality of life issues)
- Specific assistance requested/opened through a Governor's Declaration.

Note: Specific assistance requested through the Governor's Declaration is generally assistance that is unavailable under non-disaster/emergency circumstances.

The impacted jurisdiction requesting a Governor's declaration must ensure that:

- All local disaster relief forces are utilized to the maximum extent possible.
- All contractors are utilized to the maximum extent possible and relevant.
- Activations under the MEMAC, other standing mutual aid agreements, and nearby resources have been utilized to the maximum extent possible and relevant.

The MSP/EMHSD District Coordinator will help to verify that the local resources listed above are exhausted. State disaster assistance is used to **supplement local efforts and resources**, and to help relieve extraordinary burden. It is **not** to be used for simple budgetary relief or to relieve any perceived financial hardship.

State Emergency/Disaster Declaration

#SOM The Governor receives the MSP/EMHSD's recommendation to approve or deny the local jurisdiction's request for a declaration of "state of emergency" or "state of disaster" and decides to approve or deny the local jurisdiction's request. Pursuant to 1976 PA 390, as amended, the Governor may declare a "state of emergency" or "state of disaster" and activate applicable relief forces if an emergency or disaster or imminent threat thereof exists. The SDEM, or the DSDEM as authorized representative, will implement the orders and directives of the Governor in the event of a "state of emergency" or "state of disaster" declaration. The SEOC will be activated as the primary point of direction and control for

coordinating state response and recovery activities. In some situations, additional coordinating facilities may be established at or near the incident site.

Provision of State Assistance

#SOM State assistance may be provided with or without a Governor's declaration of a "state of emergency" or "state of disaster" with the exception of direct financial assistance to the local jurisdictions impacted. Some forms of state assistance are available to local jurisdictions regularly and include:

- Additional law enforcement or security assistance.
- Additional GIS support.
- Technical expertise in various fields.

In a declared disaster or emergency, additional resources otherwise unavailable to the jurisdictions are made available for incident response and recovery. Some examples of additional resources include but are not limited to:

- Activation of the National Guard.
- Availability of EMAC Resource Requests.

If immediate actions are required, the SDEMHS may initiate temporary assistance to the affected area. The SEOC will monitor the situation and maintain contact with the affected jurisdiction(s). Appropriate state departments/agencies and NGO partners will be notified and mobilized as necessary to provide direct assistance to the jurisdictions included in the Governor's declaration. These state departments/agencies and NGO partners are organized and coordinated through the SEOC. (See "SEOC Operations"). The MSP/EMHSD DC may assist in coordinating these resources and state activities via the local EOC and in coordination with the local EMC. The SEOC and/or DSDEM (or SDEM) will keep the Governor informed of the situation, and if conditions warrant, recommend that supplemental assistance be sought (see "Supplemental Assistance hierarchy for Incident Response and Recovery"). The Governor will take the actions they deem appropriate to respond to and recover from the emergency or disaster.

Section 18 and 19 Funding

#S.18.19 After a state declaration of disaster or emergency is granted by the Governor, the local jurisdictions and state agencies affected may apply for State Disaster Assistance grants as detailed in Sections 18 and 19 of PA 390 (hereafter called "Section 18 Funding" and "Section 19 Funding"). This funding is only available after a state declaration of disaster or emergency is granted and federal funding is not available. This grant program is reimbursement based with thresholds based on applicant population and/or operating budget. The grant program is **not intended to recoup the entirety of the cost of a disaster or emergency and is not to be utilized as a funding stream.**

Only a local unit of government, including a county, city, village, or township is an eligible applicant under the State Disaster Assistance grant program detailed in Section 19. The purpose is to provide financial assistance for costs incurred in response and recovery from a state declared disaster or emergency. To be eligible for this program, the applicant must meet the following criteria:

- Demonstrate exhaustion of local effort in disaster or emergency response.
- Applicant maintains an emergency management program, reviewed by, and determined to be current by MSP/EMHSD, before the disaster or emergency for which assistance is being requested.
- Evidence that the emergency operations plan was implemented in a timely manner at the beginning of the disaster.
- Experience an extraordinary financial burden. This is demonstrated by the applicant incurring eligible expenditures over a consecutive 5-day period of the lesser of $30,000 or one percent of the current year general funds operating budget of an agency/department within the applicant jurisdiction.

Costs which are eligible for reimbursement under Section 19 include:

- Cost to repair public buildings, transportation infrastructure or other public facilities damaged as a result of the incident.
- Overtime costs and related fringe benefits.
- Contracts required for disaster or emergency response, including mutual aid agreements.
- Shelter supplies.
- Fuel for equipment that is used to respond to the disaster or emergency.
- Repair costs for equipment damaged as a result of use during the disaster or emergency.

A state agency may receive Section 18 funding upon appropriation for the purpose of paying necessary and reasonable overtime, travel, and subsistence expenses incurred by the agency while under direction of the director of the MSP, or

their designee, during a disaster or emergency related operation. With the concurrence of the Governor, funding may also be provided for other needs required for the mitigation of the effects of, or in response to, a disaster or emergency.

Heightened State of Alert Declaration

Under 1976 PA 390, as amended, the Governor may also declare a "heightened state of alert" if he or she believe that terrorists or members of terrorist organizations are within the state or that acts of terrorism may be committed in the state or against a vital resource. Such a declaration provides the Governor with many of the same authorities provided under a "state of emergency" or "state of disaster" declaration described above and can be instituted to safeguard the interests of the state or a vital resource, to prevent or respond to acts of terrorism, or to facilitate the apprehension of terrorists or members of a terrorist organization and those acting in concert with them.

OBTAINING FEDERAL ASSISTANCE

#FED

Governor's Request for Federal Assistance

1. The Governor declares a state of disaster or emergency for the State of Michigan or an area of the state.
2. The Governor determines federal assistance is needed to respond to this incident.
3. A joint preliminary damage assessment (PDA) with FEMA, MSP/EMHSD, and the local jurisdiction(s) verifies damage assessment information submitted by the local jurisdiction(s) and that a federal declaration of emergency or disaster is needed.

   NOTE: Per the FEMA Disaster Operations Legal Reference; "…FEMA may waive the requirement for a joint PDA when the incident is of such unusual severity and magnitude that field damage assessments are not necessary to determine whether supplemental federal assistance is appropriate…"
4. On behalf of the Governor's Office, the MSP/EMHSD writes a letter using information gathered in the PDA, demographic data, disaster statistic data, and other supporting materials.
5. The Governor's request to the President of the United States is forwarded to the FEMA Region V Administrator, who analyzes the request and makes a recommendation to the FEMA Director. The FEMA Director recommends a course of action to the President.

Presidential Declaration

Under the Stafford Act, the President has three options when a Governor's request for a declaration is submitted:

1. Deny the request.
   - Disaster assistance may be obtained from specific federal departments/ agencies through steady state operations, and through volunteer organizations.
2. Declare a state of emergency.
   - A Presidential state of emergency declaration provides specialized assistance from federal departments/ agencies and some NGO partners in meeting specific needs which the federal government can provide. For more information on assistance available in a state of emergency, see "Provision of State Assistance".
3. Declare a major disaster.
   - A Presidential major disaster declaration provides a variety of federal assistance programs to jurisdictions within the designated disaster area, including Individual Assistance, Public Assistance, and Hazard Mitigation Assistance. Volunteer organizations and NGO partners are likely to be involved also. For more information on assistance available in a state of emergency, see "Provision of State Assistance".

Provision of Federal Assistance

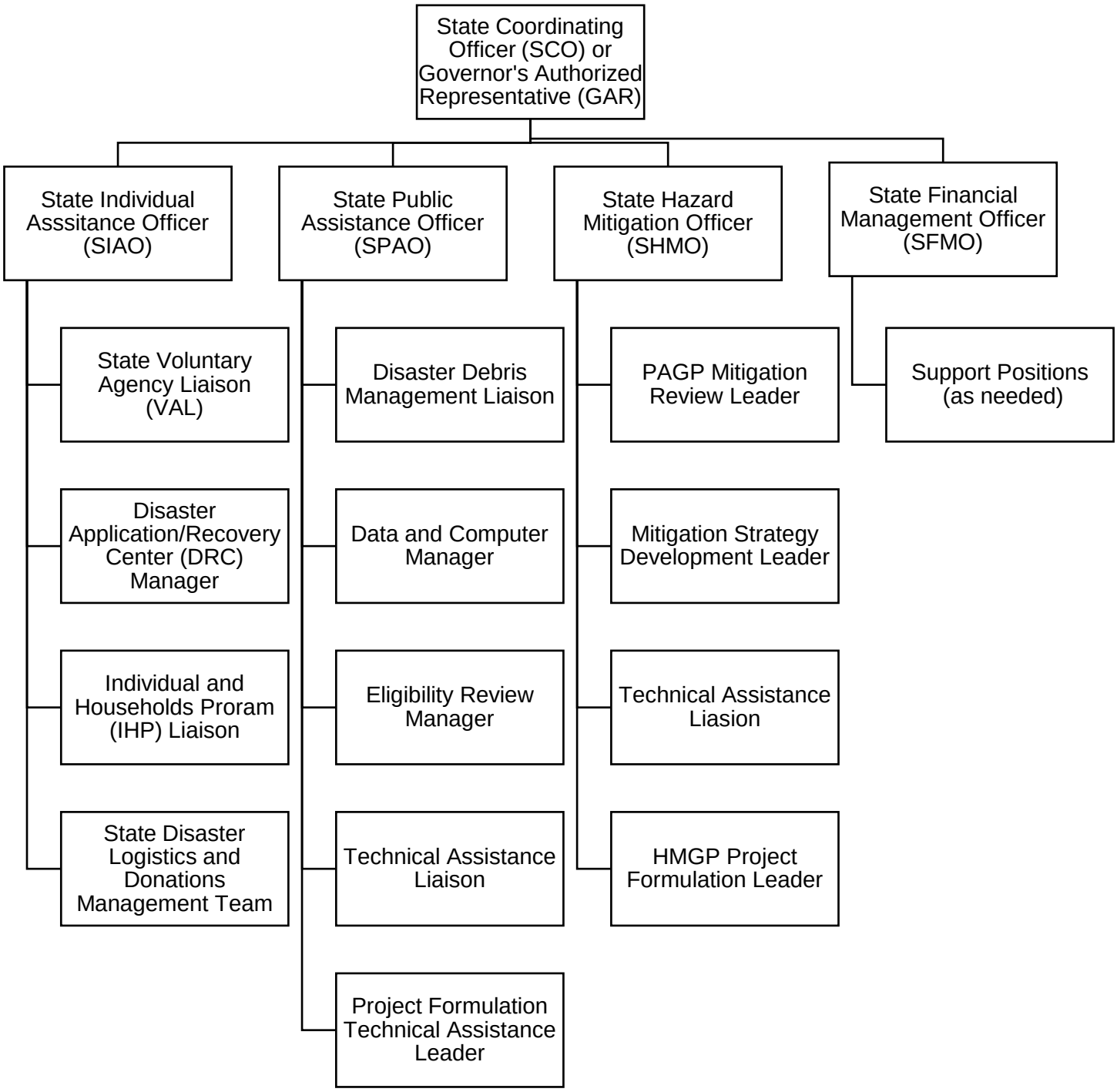
If the President approves the Governor's request for a declaration the following activities will occur:

1. The President will appoint a FEMA representative to serve as Federal Coordinating Officer (FCO) who coordinates the implementation and administration of federal disaster assistance programs.
2. The Governor will appoint a State Coordinating Officer (SCO) who coordinates state and local assistance efforts with the federal government. (Often the SCO is the DSDEM).
3. The FCO and SCO establish a location for the Joint Field Office (JFO), which disaster relief and recovery operations are managed from. See "Joint Field Office Organizational Structure for State Staff".
4. The Governor will appoint from the MSP/EMHSD a Governor's Authorized Representative (GAR) to execute, on behalf of the state, all documents for disaster assistance.

Figure 7: Emergency/Disaster Declaration Process

Following an incident occurrence, the local emergency management agency and local MSP Post will respond to the incident. The local EOC may be activated, and a local “state of emergency” may be declared; further the activation of mutual aid agreements (including MEMAC), and utilization of private sector partnerships and voluntary agency partnerships may bolster local response. The local EMC may request assistance from the MSP/EMHSD, which may provide State resources as well as leverage private sector partnerships and MI VOAD resources. Upon the exhaustion of local resources, a request may be made to the Governor’s Office (via MSP/EMHSD) for a “State Declaration”. The Governor’s Office may declare a “State of Emergency” or a “State of Disaster”, which opens more resources from the State to assist in the response and recovery to the incident. The Governor may authorize additional mutual aid including EMAC and NEMAC; and begin requesting assistance through FEMA Region V in Chicago, Illinois. FEMA may provide direct response assistance to save lives, prevent injuries, protect properties and the environment, and coordinate with the State to conduct PDAs. Should a disaster exceed the capabilities of the State with mutual aid assistance and partners activities, the President of the United States may approve or deny a request for a federal “State of Emergency” or “State of Disaster” for the State of Michigan. A federal declaration approved by the President may activate federal disaster assistance programs or offer the opportunity for the State to apply for additional programs.

Figure 8: Typical Joint Field Office Organizational Structure for State Staff



LINE OF SUCCESSION FOR THE GOVERNOR

If the Governor is unable or unavailable to exercise the powers and duties of their office (for emergency management/homeland security or any other purpose), the Michigan Constitution of 1963, 1959 PA 202 (Emergency Interim Executive Succession Act), and the *Michigan Continuity of Government Plan (MCOGP) – MSP/EMHSD Publication 110*, provide for the following line of succession:

1. Lieutenant Governor.
2. Elected Secretary of State.
3. Elected Attorney General.
4. President Pro Tempore of the Senate.
5. Speaker of the House of Representatives.
6. Emergency Interim Successor highest in order of succession. (Per 1959 PA 202)

STATE DEPARTMENT/ AGENCY GENERAL RESPONSIBILITIES

Listed below are the general responsibilities of state departments/agencies with regards to overall emergency management preparedness, mitigation, response, and recovery.

- Provide trained, empowered state emergency management coordinator (SEMC) with authority to speak on behalf of agency, and with situational awareness across their agency relative to emergency management.
- Maintain appropriate sections to this plan.
- Maintain a capability to carry out emergency tasks and assignments.
- Develop appropriate internal standard operating procedures (including procedures to safeguard personnel and vital records and to relocate essential resources if necessary), resource lists, and alerting procedures.
- Participate in drills and exercises to test emergency plans and procedures.
- Ensure that personnel assigned to emergency tasks are properly trained.
- Ensure that the designated department representative promptly reports to the SEOC and/or other appropriate coordinating facility, as necessary to respond to an emergency or disaster.
- If appropriate, establish a department Emergency Coordination Center (ECC) to provide continuous support to the departmental representative at the SEOC and/or other state emergency coordinating facility.
- Provide for the delivery of emergency services (i.e., personnel, equipment, materials, technical advice/assistance, facilities, and funding) when incidents occur, in accordance with this plan.
- Provide damage assessment information to the MSP/EMHSD and participate on assessment teams when requested.
- Provide situational awareness, subject matter expertise, and act as information conduits to appropriate internal and external agency partners.
- Coordinate with counterpart federal departments/agencies in the implementation of appropriate mitigation, prevention, preparedness, response, and recovery activities under the NRF and other authorities.
- If appropriate, issue protective action orders, waivers, and directives.

LOCAL GOVERNMENT GENERAL RESPONSIBILITIES

Listed below are the responsibilities of local governments with regard to overall emergency management preparedness, mitigation, response, and recovery.

- Appoint an EMC pursuant to 1976 PA 390, as amended.
- Develop and maintain an EOP or EAGs in accordance with policies and plans established by the MSP/EMHSD.
- Develop appropriate standard operating procedures (including procedures to safeguard personnel and vital records and to relocate essential resources if necessary – COOP and COG), resource lists, and alerting procedures.
- Participate in drills and exercises to test emergency plans and procedures.
- Ensure that personnel assigned emergency tasks and responsibilities are properly trained.
- Prepare and submit assessment information and other reports as requested or required.
- When incidents occur, respond with all applicable and available resources to the maximum extent possible and appropriate, including the use of nearby resources and mutual aid.
- If local resources, capabilities, and mutual aid have been exhausted and unmet needs still exist, request supplemental assistance in accordance with the process established by the MSP/EMHSD.

SEOC OPERATIONS

The State Emergency Operations Center (SEOC) is the base of operations and coordination for emergency management following a disaster or incident requiring state assistance. The SEOC is operated by the MSP/EMHSD and may be activated at different levels of response including steady state, monitoring and assessment, partial, and full activations, with the option of virtual activations (see Figure 9).

Figure 9: Michigan SEOC Activation Level Table

	Level		Description	SEOC Staffing	Activities
	4	**Steady State Operations**	Routine operations	• None	• MSP/EMHSD Duty Officer monitoring all incidents • District Coordinators engaged locally
Activated	3	**Monitoring and Assessment**	Monitor ongoing incidents which could potentially result in local declarations and/or require state support	• SEOC Command & General Staff	• Operations takes over incident coordination • Monitoring MI CIMS for local incident details • District Coordinators engaged local EOC activities • Complete Situation Reports
Activated	2	**Partial Activation**	Support incidents where one or more jurisdictions request state support	• SEOC Command & General Staff • Specific state agencies, as determined by the incident	Same as Level 3, plus: • Monitor local requests for state resources • Provide state resources as requested and available • Develop an Incident Action Plan • Report agency activities
Activated	1	**Full Activation**	Support complex or large-scale incidents involving multiple jurisdictions requesting state support	• SEOC Command & General Staff • All or most state agencies	Same as Level 2, plus: • All or most state agencies activated
Activated		**Virtual**	Activation levels 1-3 may be done virtually or physically in the SEOC. This determination will be made by the SEOC Director.		

The SEOC may be activated at any of the above listed levels when one of the following occurs but is generally activated when an incident has exceeded the capacity of local jurisdictions to respond to an incident; putting life safety, incident stabilization, property and/or the environment in danger. The SEOC generally becomes activated when:

- The Duty Officer (Captain, Inspector, or designated Command of MSP/EMHSD) is informed of an incident which warrants the intervention of the SEOC through the DC or MSP Operations Lieutenants (as determined by the Captain, Inspector, or designated Command of MSP/EMHSD).
- A DC or local EMC requests state assistance in a local disaster or incident.
- The Governor, SDEMHS, DSDEM, or DSDHS determines that there is a need to respond to a local disaster or incident.

Within the SEOC, operations are conducted using the ICS and NIMS structure and system as outlined in the National Response Framework (see “NIMS Compliance”). ICS is flexible and scalable, and this is reflected in the SEOC’s operations which may include the activation of any combination of the following: Command, Command and General Staff (CGS), General staff support, various ESF lead and/or support agencies, partner agencies, and/or other subject matter experts. Dependent upon the level of activation and severity of the incident, any or all of those listed here may be active in the SEOC. To facilitate continual availability of SEOC staff, the EMHSD has three teams which can fully staff the SEOC’s CGS and support positions. Below is an organizational chart which shows the command, CGS, general staff support, and ESF branches that may be activated in a large or complex disaster.

Figure 10: Chart of SEOC Operations: Command and General Staff

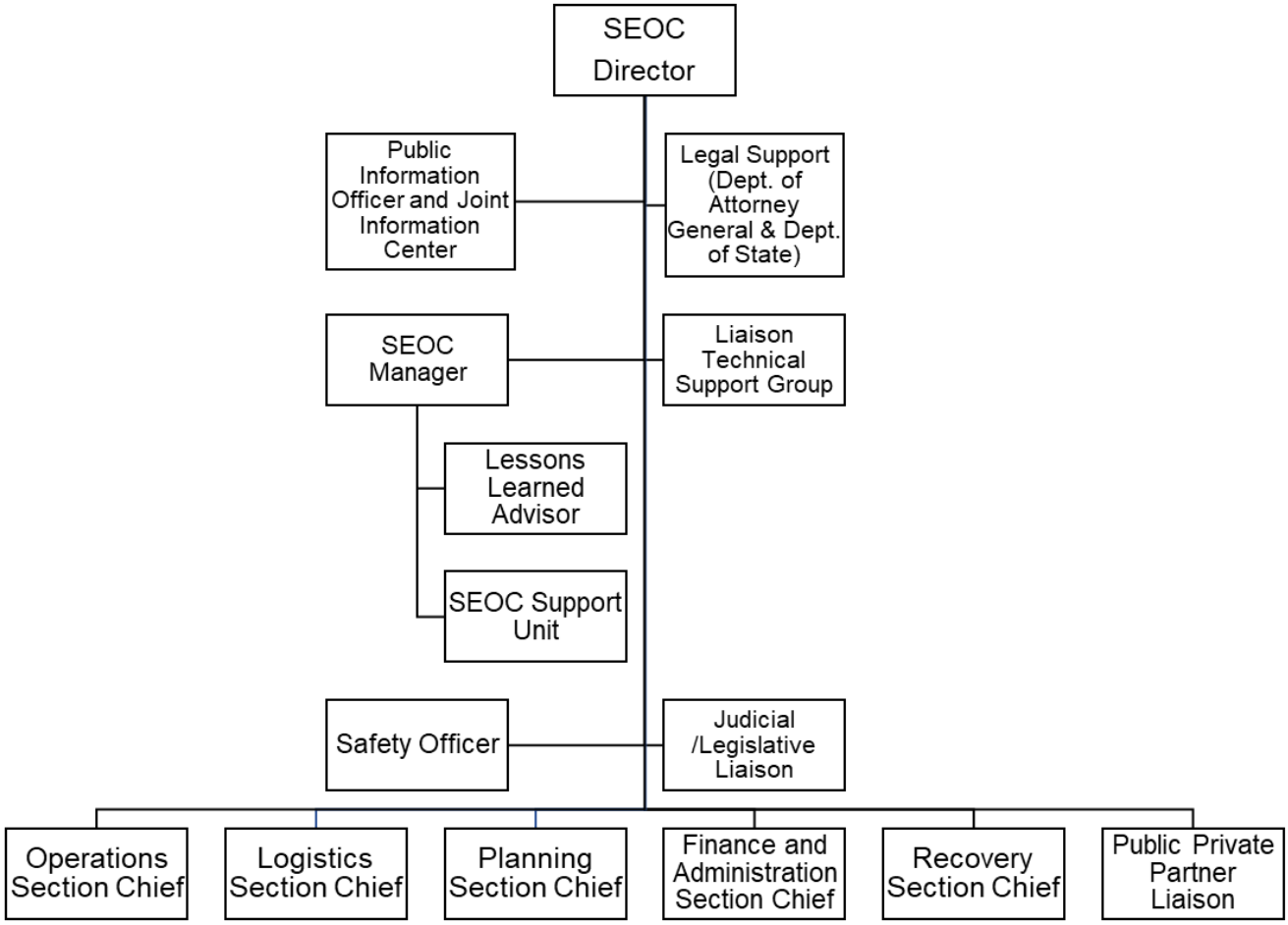


Figure 11: Chart of SEOC Operations: Planning Section

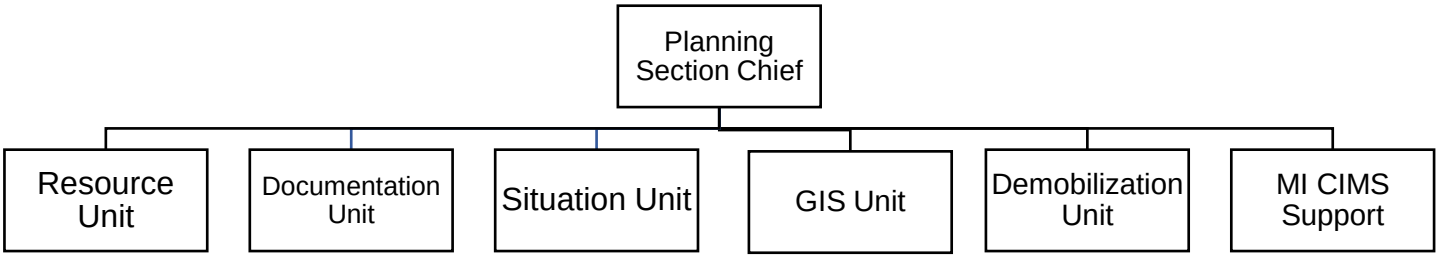


Figure12: Chart of SEOC Operations: Operations Section

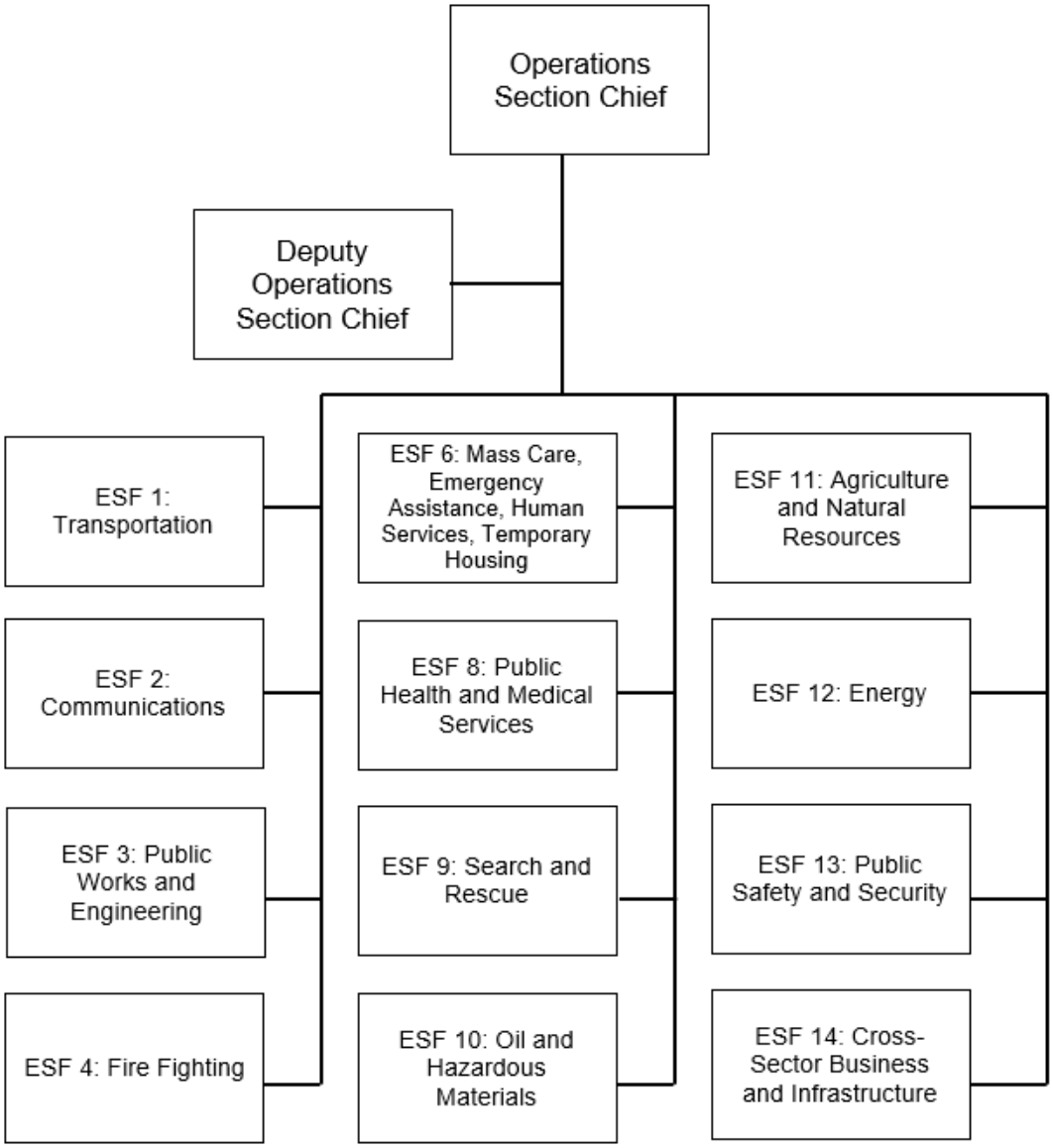


Figure13: Chart of SEOC Operations: Finance and Administration Section

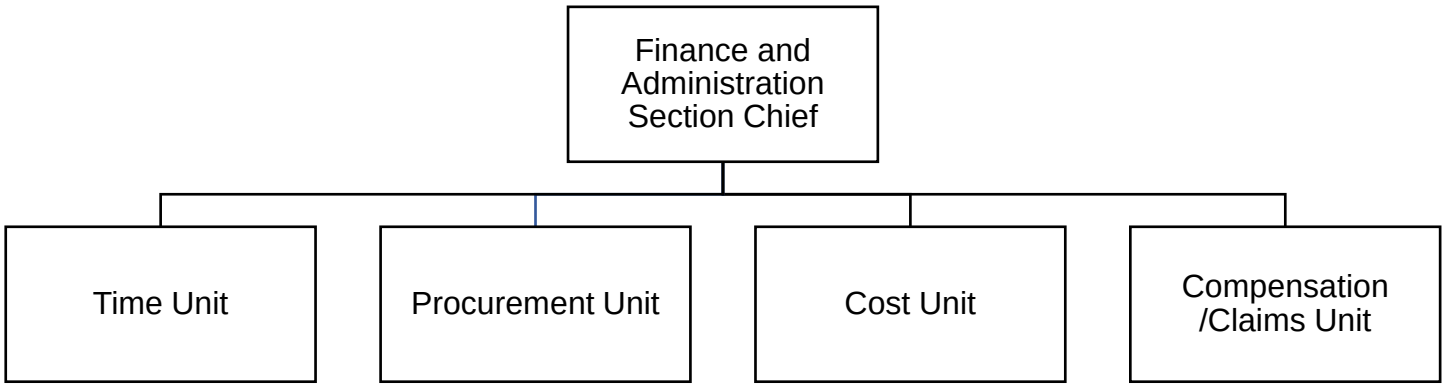


Figure 14: Chart of SEOC Operations: Logistics Section

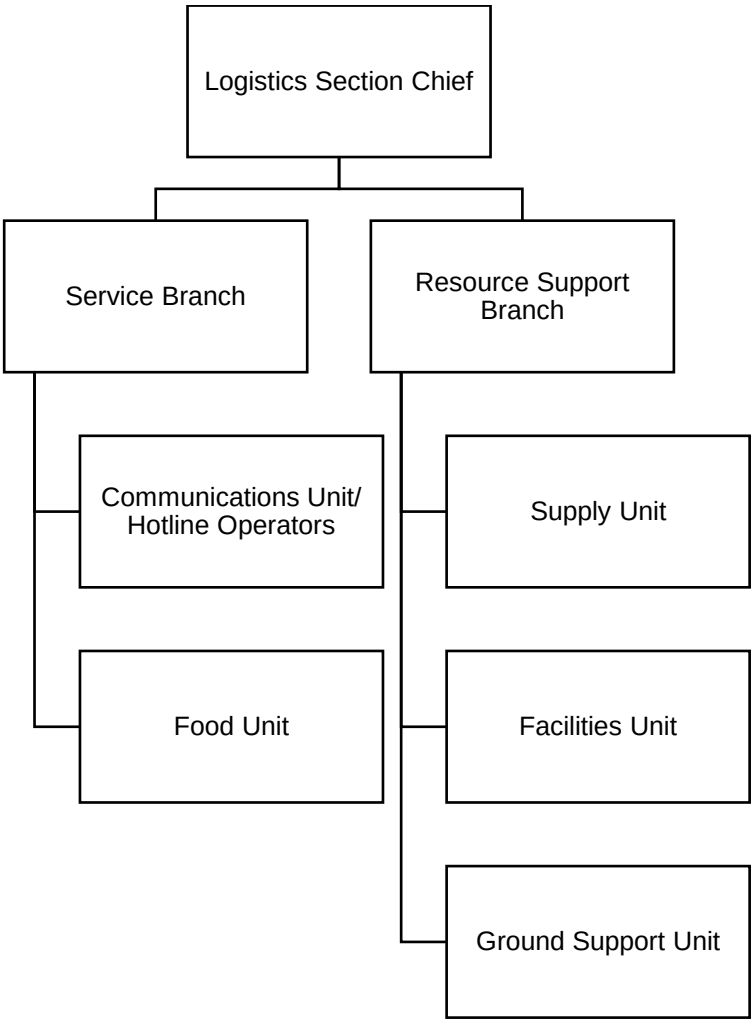
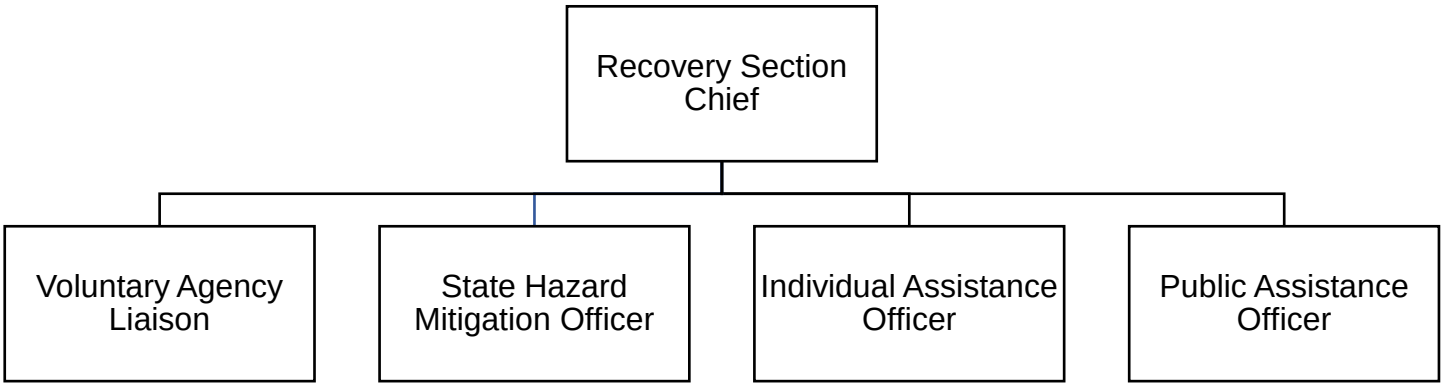


Figure 15: Chart of SEOC Operations: Recovery Section



SEOC Operations

The SEOC structure expands, and contracts as needed dependent upon the size, scope, and needs of the incident; as such, all the above positions may or may not be activated as needed. All positions in the SEOC have Standard Operating Procedures (SOPs) which detail their specific needs and responsibilities. Each SEOC position's SOPs and requirements are based on the ICS and FEMA's position task book, however some positions have additional areas for consideration in the Michigan SEOC. Some examples of additional responsibilities are outlined below.

Position	Acronym	Additional Duties/Notes
SEOC Director	S.D.	Usually SDEMHS or DSDEM but can be designated or delegated.
Safety Officer	SOFR	Also functions as medical unit when in the SEOC.
Public Information Officer	PIO	Acting lead for ESF 15: External Affairs, unless otherwise designated or delegated.
SEOC Manager		Assists the IC in managing SEOC needs and operations.
Lessons Learned Advisor	LLA	During and after an exercise, incident, or activation observes and records best practices, successes, and areas for improvement.
Operations Section Chief	OSC	All ESF branches under OSC have an ESF lead agency which represents the ESF response in the SEOC. Each ESF lead agency has ESF support agencies which enact ESF-specific activities needed to complete identified objectives.
Planning Section Chief	PSC	Acting co-lead for ESF 5: Planning and Information, unless otherwise designated or delegated.
Situation Unit Leader	SITL	Creates the Situation Report (SitRep) organized by ESFs, a Senior Leadership Brief organized by Lifelines, and assists in the creation of the Incident Action Plan (IAP).
Logistics Section Chief	LSC	Acting lead for ESF 7: Logistics Management, unless otherwise designated or delegated.
Finance Section Chief	FSC	Acting co-lead for ESF 5: Planning and Information, unless otherwise designated or delegated.
Recovery Section Chief	RSC	May be active long after the SEOC has ceased operations. Coordinates preliminary damage assessments (PDAs) with FEMA, locals, and state agencies.

#SOM Each SEMC in the SEOC may also have SOPs which reflect their position duties in the SEOC and ESFs. The ESF leaders under the OSC are SEMCs for the lead agency for that ESF (unless otherwise designated or delegated). State agencies which support various ESFs talk with their ESF leaders in the SEOC to coordinate state agency responses to incidents. The SEMC's SOPs reflect not only their position in the SEOC, but also their interaction with internal ECCs. Each state agency can set up an ECC which supports the SEMC in the SEOC. The ECC is where the state agency coordinates agency-specific logistics, policy direction, and technical assistance to ensure the delivery of core capabilities as identified in the SEOC.

LIFELINES

In 2018, FEMA began to introduce the concept of Community Lifelines following the response and recovery to the historic Hurricane season of 2017; these Community Lifelines where then integrated into the 4th edition of the National Response Framework (2019). Community Lifelines (commonly referred to as 'Lifelines') include seven Lifelines which the federal government has determined are critical to the stabilization of an incident indicating the end of federal assistance needed in a disaster. Lifelines act as a tool for decision makers to determine if an incident is stable and therefore does not require the additional support of the federal (or state) government. Lifelines do not encompass all aspects of an incident, and the stabilization of Lifelines does not indicate the end of an incident response and recovery – however "community lifelines are those services that enable the continuous operation of critical government and business functions and are essential to human health and safety or economic security." ESFs deliver core capabilities which are used to stabilize Lifelines. Below are the seven Lifelines and their associated icon.

Each of the seven Lifelines have one or multiple Components, which have Subcomponents that support those Components. Each Subcomponent can be labeled as red, green, yellow, or gray. Figures 16 and 17 below demonstrates the difference and implications of each colored label in the State of Michigan (colors indicating lifeline or component condition may differ from FEMA's system).

Figure 16: Colors Indicating Lifeline or Component Status utilized by FEMA

Color	Indicator	Notes
Gray	Unknown	The status of this lifeline, component, or subcomponent is unknown, and may or may not be relevant to the incident.
Red	Unstable	Lifelines are disrupted with no solution identified or in progress *or* Lifelines are disrupted at a local level and are in critical need from state assistance.
Yellow	Uncertain or Stabilizing	The lifelines are in transition towards or away from stabilization (green).
Green	Stable	Lifeline was impacted but local response is able to source resources at the local level.

Figure 17: Colors Indicating Lifeline or Component Status utilized by the State of Michigan SEOC

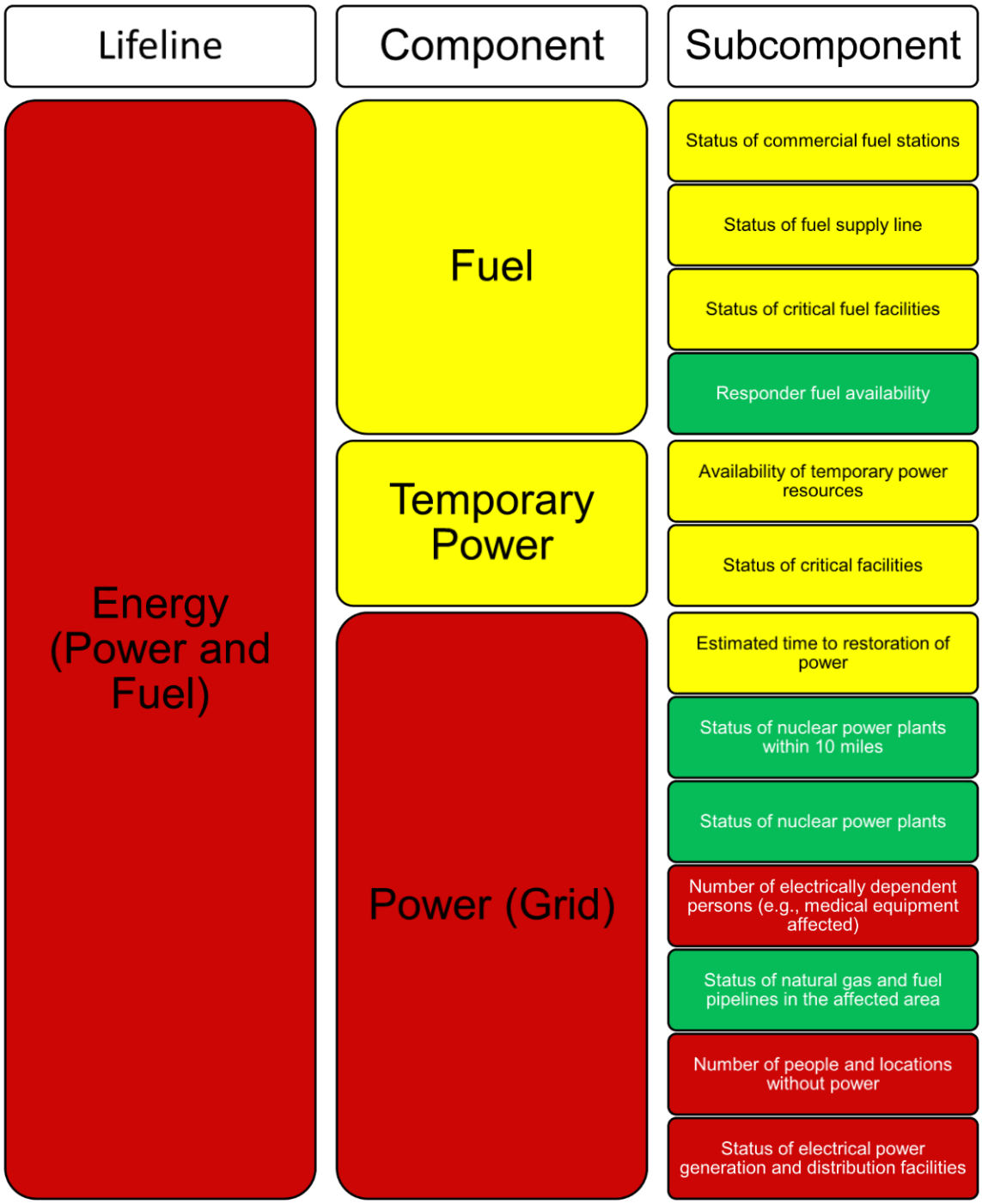
Color	Indicator	Notes
Red	Noteworthy impacts (or potential impacts)	Lifeline impacts require extensive state assistance and/or the attention of key decision makers.
Yellow	Moderate impact	Response efforts might require limited state assistance.
Green	Normal Operations/minimal local impact	Lifeline impacts are sufficiently managed by the local jurisdiction.

Depending on how many Subcomponents are red or yellow, and the significance of that Subcomponent to the entire Component, the entire Component may change status also. The number, significance, and severity of the various Components may change the entire Lifeline to a different color/status. Depending on incident conditions, the State of Michigan SEOC may or may not evaluate the status of specific Lifeline Components and Subcomponents to establish the overall status for each Lifeline.

Figure 18 below demonstrates the interdependencies between the Subcomponents, Components, and Lifelines. In this figure, the energy lifeline is used to demonstrate the process which subcomponents can impact lifeline color indicators. The temporary power component has two subcomponents: availability of temporary power resources, and status of critical facilities. Both of these subcomponents are at a yellow status (uncertain or stabilizing). The temporary power component is yellow because the two subcomponents under it are yellow. The Lifeline is red (unstable), however, because there are two yellow (uncertain or stabilizing) components, and one red (unstable) component. This is because the red (unstable) component is weighed against the two yellow (uncertain or stabilizing components) and found to be more weighted, and as such, influences the lifeline to be red. This weighing of subcomponents and components as part of lifeline may change

depending on the incident. (E.g., Difficulty getting access to power to many residents in December in Michigan may be weighed differently than the same number without power in May.)

Figure 18: Flowchart of Color Indicators of Subcomponents impacting Lifelines: Energy



In Michigan, Lifelines are generally used for the Senior Leadership Brief, created by the SITL for the IC and any Executive Officials. Annex II of this document includes worksheets for each Lifeline which include a place to record the status of the Components, Subcomponents, their impacts and limiting factors, and which ESFs are most closely associated with each Subcomponent.

EMERGENCY SUPPORT FUNCTIONS

EMERGENCY SUPPORT FUNCTION DESCRIPTION

Emergency Support Functions (or ESFs) are a method of grouping people, resources, systems, and functions to "…provide the structure for coordinating [state] interagency support for a [state] response to an incident" (FEMA.gov/National Response Framework). The ESFs are used in the response phase of a disaster to provide the core capabilities needed to respond to the incident to secure the life safety, scene security, protection of property and the environment, and prepare for recovery operations which use Recovery Support Functions (RSFs). Not every ESF is activated in every response; consistent with the NIMS framework, only the ESF's that are needed are activated in response to an incident.

In Michigan, each ESF has one or two lead agencies which are the primary point(s) of contact for the ESF's response activities in the SEOC. In addition, these lead agencies may be contacted regarding ESF planning for major exercises, trainings, events, and plan updates. The lead agency(s) of each ESF coordinate with the other supporting agencies and partners in that ESF and report to the OSC in the SEOC for that ESF's activities.

Each ESF annex includes the definition and purpose of the ESF, the scope of that ESF's activities, and the core capabilities associated with that ESF. In addition, the Lifelines which are most closely associated with that ESF are described, though all ESF's support all Lifelines. Any other ESFs which overlap significantly are described along with the capacity in which the overlap occurs. Additional plans, annexes, or other guiding documents which are directly tied to that ESF are also listed with a brief description of the connection between those documents and the ESF. The lead agency is listed, followed by the support state agencies, support federal agencies, and non-governmental partners. Under each of these agencies are the listed tasks which that agency is responsible for to support the ESF's overall function in delivering response activities. Although tasks are listed numerically, the number associated with the task has no bearing on its level of importance; rather it is to assist users of the document to refer to specific tasks within an ESF and agency's list. These tasks are further broken down by mission area. Note that the ESFs are response oriented, though some tasks generally fall under them despite being in a different mission area – prevention, protection, mitigation, and recovery tasks which are organized under ESFs are related to the response tasks listed and supplement other plans, policies, and procedures identified for those mission areas.

Figure 19 below identifies the lead agency of each ESF annex.

Figure 19: ESF and Lead State Agency Cross Walk

	MDARD	EGLE	MDHHS-Health	MDHHS-Human	LARA-BFS	LARA-MPSC	MDNR	DTMB	MSP	MSP-EMHSD	MDOT	ARC
ESF 1: Transportation											■	
ESF 2: Communication								■				
ESF 3: Public Works and Engineering		■										
ESF 4: Fire Fighting					■		■					
ESF 5: Information and Planning										■		
ESF 6: Mass Care, Emergency Assistance, Temporary Housing, and Human Services			■	■								■
ESF 7: Logistics										■		
ESF 8: Public Health and Medical Services			■									
ESF 9: Search and Rescue									■			
ESF 10: Oil and Hazardous Materials		■										
ESF 11: Agriculture and Natural Resources	■											
ESF 12: Energy						■						
ESF 13: Public Safety and Security									■			
ESF 14: Cross Sector Business and Infrastructure												
ESF 15: External Affairs										■		

ESF 1: TRANSPORTATION

Definition/Purpose: The purpose of ESF 1 is to provide support by assisting local, state, tribal, and federal governments, voluntary organizations, nongovernmental organizations, and private sector in the management of transportation systems and infrastructure during domestic threats or in response to actual or potential incidents. ESF 1 is not responsible for movement of goods, equipment, animals, or people.

Scope: Activities in this ESF sustain transportation services, mitigate adverse economic impacts, and meet societal needs. Primary functional responsibilities in ESF 1 include:

- Monitoring and reporting status of, and damage to, the transportation system and infrastructure due to an incident.
- Identifying temporary alternative transportation solutions that can be implemented when systems or infrastructure are damaged, unavailable, or overwhelmed.
- Coordinating and supporting prevention, preparedness, response, recovery, and mitigation activities among transportation stakeholders within the authorities and resource limitations of ESF 1 agencies.
- Coordinates with federal partners and supports for mass evacuations as identified and addressed in the MSP/EMHSD Publication 101b: MEMP Evacuation and Mass Shelter Support Plan and/or the Mass Evacuation Annex to the National Response Framework (NRF).

Core Capabilities: Critical Transportation

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 1 supports multiple Lifelines, however the Lifeline most impacted by ESF 1 is the Transportation Lifeline.

Other ESF Overlap:
ESF 6: Mass Care, Emergency Assistance, Temporary Housing, and Human Services – The evacuation of a great number of people requires extensive coordination between ESF 1 and ESF 6. Further, the systems by which to transport displaced persons require coordination between the public, private, non-governmental, and volunteer partners.
ESF 7: Logistics – Many resources which are needed to support ESF 1, including but not limited to passenger vehicles, trucks, construction equipment, mass transportation resources, and buses, are purchased, rented, leased, or otherwise contracted through ESF 7.
ESF 11: Agriculture and Natural Resources – The evacuation of service animals, companion animals, exotic pets, livestock, zoo animals, and other animals in disasters requires extensive coordination between ESF 1 and ESF 11.

Other Plans and Annexes:
Disaster-specific Annex: Passenger Transportation Accident (Air, Rail, Road, Water) – Incidents which include passenger transportation potentially require coordination with ESF 1 and ESF 13 partners to ensure the life safety of passengers is addressed and future transportation incidents can be averted.
Disaster-specific Annex: Infrastructure Failure – The failure of transportation infrastructure requires coordination amongst various private and public stakeholders. Transportation infrastructure includes but is not limited to roadways, bridges, tunnels, railways, pipelines, ferries and other water transportation, and airports and other aviation transportation.
MSP/EMHSD Publication 111: Emergency Repatriation Plan – Upon repatriation, many individuals may require additional transportation assistance which can be coordinated through the establishment of systems by which to transport diasporic populations.
MSP/EMHSD Publication 101b: Evacuation and Mass Shelter Support Plan - The evacuation of large populations requires extensive coordination with ESF 1 partners to ensure routes and systems for the movement of large numbers of people are established and managed.

Other Areas of Interest:
The United States Department of Transportation (USDOT) is the lead agency in matters regarding airport regulations, mass transit, pipeline management, and contraflow planning for mass evacuation. The Michigan Department of Transportation (MDOT) may assist with these functions, however, MDOT has limited capabilities due to funding and legal limitations.

Tasks: Lead Agency
Michigan Department of Transportation (MDOT)
The Michigan Department of Transportation (MDOT) is bound by constitutional restrictions of state and federal funds; and as such some tasks listed below are dependent upon a Declaration of Disaster or Emergency by the Governor.

1. Provide transportation and threat information reports, including any suspicious activity reports. (Prevent)
    a. Maintain regulatory plans for different sectors including; rail, passenger transport, air, etc.

2. Provide funding for transportation system development and maintenance. (Prevent)
3. Coordinate air, bus, rail, and water way transportation safety programs. (Prevent)
4. Railroad transportation safety programs include:
    i. Railroad crossing enhancements.
    ii. Education campaigns.
    iii. Railroad infrastructure improvements.
5. Protect transportation infrastructure from the effects of manmade and natural disasters, and terrorism; this includes but is not limited to: (Protect)
    a. Protecting transportation infrastructure.
    b. Funding growth and resiliency of transportation infrastructures and systems.
6. Provide technical assistance to Public Assistance Grant Program (PAGP) and Hazard Mitigation Grant Program (HMGP) in the form of engineering services to MDOT. This assistance requires a Declaration of Disaster or Emergency from the Governor to be accessed. (Mitigate)
7. Deploy members to positions in the state emergency operations center. (Respond)
    a. As necessary and available, within the confines of constitutional restrictions, deploy individuals to region offices.
    b. Coordinate to ensure roads that lead to air transportation are available through coordination within the Joint Standard Operation Procedures (JSOPs).
8. Monitor and report damages and impacts to transportation related infrastructure and key resources (excluding pipelines and motor carrier enforcement; see ESF 10). (Respond)
    a. Local government or private sector roadways and facilities are monitored by the local government or private sector, and information is coordinated through MDOT.
    b. Privately-owned, publicly-used transportation facilities, such as airports, are coordinated with the private owners and MDOT.
9. Provide air services for emergency transportation, and documentation of air services. (Respond)
10. Coordinate with and explore available resources available to and for local resources, private sector partners, and other state agencies to secure additional mass transportation resources for evacuation. (Respond)
11. Provide resources to support emergency operations. (Respond)
12. Provide resources for the assessment of damage to, and impact of, failed transportation infrastructure and accidents, with a Declaration of Disaster or Emergency from the Governor. (Respond)
13. Provide situational awareness of damage to, and impacts of, transportation failures and accidents. (Respond)
14. Coordinate with the USDOT for transportation response activities, including limiting or restricting air, rail, water, and vehicular traffic. (Respond)
    a. Coordinate with MSP to implement the joint standard operating procedures.
15. Provide appropriate engineering and contracting/procurement personnel and equipment to assist in emergency removal of debris, demolition, repair of roads and bridges, and temporary repair of essential public facilities. (Respond)
16. Coordinate the stabilization and reestablishment of transportation systems and infrastructure. (Recover)
17. Maintain, repair, and restore the state highway/trunk line system and state-owned rail lines. (Recover)
18. Coordinate the Federal Highway Administration (FHWA) Emergency Relief Program. (Recover)
    a. Monitor FEMA's Public Assistance (PA) programs similar to the programs in the FHWA to ensure there is not a duplication of services, and that rules and regulations are observed.
19. Conduct activities under the direct authority of MDOT elements as related to air, maritime, transit (non-vehicular use of roads), and rail. (All)
20. Provide commercial marine transportation information. (All)

Tasks: State Government Support Agencies

Governor's Office

1. Provide a liaison to the SEOC responding to transportation incident if incident has potential international implications. (Respond)
2. Governor may direct and compel evacuation. (Respond)
3. Coordinate international offers for transportation-related assistance. (Respond)
4. Coordinate with the federal government with regards to modifications or revocation of previously approved foreign diplomatic aircraft clearances (referring to DOT/FAA airspace restrictions). (All)

Michigan Department of Agriculture and Rural Development (MDARD)

1. Coordinate the evacuation of service and companion animals. (Respond)
2. May assist in securing transportation assets to ESF 1 when Forest Service resources are most effective. (Respond)

Michigan Department of Civil Rights (MDCR)

1. Advise responsible agencies and entities to make do considerations of specific populations, their circumstances, and special needs, when making and executing disaster or emergency plans. (All)

Department of Education (MDE)

1. Coordinate school bus driver safety initiatives. (Protect)
2. Ensure availability of accessible transportation option for individuals with disabilities and others with access and functional needs during mass evacuations – including but not limited to students and staff. (Respond)

Department of Environment, Great Lakes, and Energy (EGLE)

1. Provide support to assist in emergency removal of debris, demolition, repair of roads and bridges, and temporary repair of essential public facilities. (Respond)
2. National Nuclear Security Administration provides fixed- and rotary-wing aircrafts to support radiological environment surveys or research capabilities during a radiological or nuclear incident. (Respond)
3. Coordinate with other maritime stakeholders and support agencies for mission assignments to prioritize, evaluate, and support restoration of domestic ports, shipping, waterways, and related systems and infrastructures. (Recover)
4. Management of hazardous materials movement on transportation infrastructures. (All)

Department of Health and Human Services (MDHHS) – Human Services

1. Identify transportation modes and capabilities for all populations, including individuals located in hospitals and nursing homes, and with disabilities and others with access and functional needs. (Prevent)
2. Provide available accessible transportation options for individuals with disabilities and others with access and functional needs during mass evacuations. (Respond)
3. Provide transportation for evacuees who have chronic medical conditions and may need to be evacuated with the general population. (Respond)

Department of Health and Human Services (MDHHS) – Health

1. Provide contracted, managed, multi-functional medical support resources and capabilities as needed in support of Federal assistance through FEMA's National Evacuation Program. (Mitigate)
2. Evacuation of service and companion animals. (Respond)
3. Provide assets to address security and on-site coordination for ground operations of mass air evacuation operations. (Respond)
4. Aviation Disaster Family Assistance Act – National Transportation Safety Board (NTSB) can request activation and assistance of a Disaster Mortuary Operations Response Team (DMORT). (Respond)
5. Evacuees who have chronic medical conditions may be evacuated with the general population. Evacuations of fragile, elderly, or vulnerable populations, utilizing local health services. (Respond)
6. Identify, and if possible, coordinate availability of accessible transportation options for individuals with disabilities and others with access and functional needs during mass evacuations. (All)
7. Identify transportation modes and capabilities for all populations, including individuals located in hospitals and nursing homes, and with disabilities and others with access and functional needs. (All)

MDHHS - Aging and Adult Services Agency (AASA)

1. Conduct a needs assessment of, and coordinate and monitor provision of assistance to elderly disaster survivor's emergency transportation. (Respond)

Department of Licensing and Regulatory Affairs (LARA)

1. Monitor facilities through various methods including surveying their plans, which should include providing all hazards emergency planning, including evacuation and transportation modes and capabilities for all populations, including individuals located in hospitals and nursing homes, and with disabilities and others with access and functional needs. (Protect)

LARA - Michigan Public Service Commission (MPSC)

1. Per Energy Security/Assurance Plan: (Respond)
    a. Fuel provisions as needed.
    b. Assist with restoration of traffic lights/controls along major evacuation routes.
2. Provide information on status of, needs for, and plans for restoration of interdependent structures. (All)
3. Conduct activities under the direct authority of LARA elements as related pipeline transportation. (All)

Department of Military and Veteran Affairs (DMVA)

1. Military transportation capacity from the US Transportation Command (USTRANSCOM) or other organizations to move essential resources when requested upon approval by the Governor. (Respond)
2. Provide staff to the headquarters ESF 1 function and regional ESF 1 when requested upon approval by the Governor. (Respond)
3. Provide assets to complement temporarily degraded or disrupted DOT/FAA air navigation services capabilities. (Respond)
4. Provide support in emergency operations and restoration of inland waterways, ports, and harbors. (Respond)
5. Transportation Support Tasks - Resource Support (Respond)
    a. Transports heavy equipment.
    b. Assets to transport personnel from the affected area (limited).
    c. Assets to transport cargo (e.g., bulk, palletized, water, petroleum, oil, etc.)
6. Aviation/Airlift Support Task Assignments - Resource Support (Respond)
    a. Provide aircraft to transport personnel and cargo.
    b. Provide military aircraft to facilitate reconnaissance, command and control, and communications.
    c. Provide airborne firefighting support.
    d. Assist in airborne medical evacuation.
    e. Provide air search and rescue.
7. Engineering Support Tasks (Respond)
    a. Rapid road and bridge construction.
8. Assist in the restoring of transportation infrastructure. (Recover)

Department of Natural Resources (MDNR)

1. Provide appropriate engineering and contracting/procurement personnel and equipment to assist in emergency removal of debris. (Respond)
2. Supplement equipment resources. (Respond)

Department of State (MDOS)

1. Provide a liaison to the SEOC responding to transportation incident if incident has potential international implications. (Respond)
2. Coordinate international offers for transportation-related assistance. (Respond)

Michigan State Police (MSP)

1. Coordinate school bus safety inspections through the Commercial Vehicle Enforcement Division (MSP-CVED). (Prevent)
2. Protect transportation infrastructure, including supporting maritime infrastructure, from the effects of manmade and natural disasters, and terrorism. (Protect)
3. Identify transportation modes and capabilities for all populations, including individuals located in hospitals and nursing homes, and with disabilities and others with access and functional needs. (Mitigate)
4. Assist the MDHHS with the transportation and distribution of the Strategic National Stockpile (SNS). (Respond)
5. Provide assets to address security and on-site coordination for ground operations of mass air evacuation operations. (Respond)
6. Coordinate with the transportation industry and MDOT for additional resources and traffic control measures to support emergency operations. (Respond)
7. Connect with the Joint Standard Operation Procedure (JSOP) for emergency closure of state highways and evacuations. (Respond)
8. Assist in evacuating areas, controlling traffic, and providing security in the affected area. (Respond)
9. Coordinate with the United States Coast Guard (USCG) and other maritime stakeholders and support agencies for mission assignments to prioritize, evaluate, and support restoration of domestic ports, shipping, waterways, and related systems and infrastructures. (Recover)
10. Provide information and assistance concerning the recovery of transportation critical infrastructure. Acting as a secondary support, which may include traffic crash reporting, and body recovery. (Recover)
11. Provide assets to address security and on-site coordination for ground operations. (All)

MSP- Emergency Management Homeland Security Division (EMHSD)

1. Coordinate and administer the federal Hazard Mitigation Assistance (HMA) program to provide funding for cost-effective mitigation measures to reduce the long-term risk to public facilities from disaster damage. (Mitigate)
2. Analyze the impact of the incident on transportation operations nationally, regionally, and statewide. (Respond)
3. Provide information and assistance concerning the recovery and restoration of transportation critical infrastructure. (Respond)

4. Identify and provide department transportation assets and support resources when most effective. (Respond)
5. Coordinate with MDOT to support MDOT providing emergency highway funding for federally owned highways and highways on the Federal Aid System. (Recover)
6. Assist in restoring the transportation infrastructure through the Stafford Act Program - provide timely funding for activation under Stafford-Act eligible activities. (Recover)
7. Provide information on status of, needs for, and plans for restoration of transportation infrastructure. (Recover)
8. Maintain a statewide damage assessment system. (Recover)
9. Organize and coordinate damage assessment and public information functions in in the SEOC. (Recover)
10. Coordinate and administer the federal Public Assistance Grant Program (PAGP) to provide funding to repair, restore, or replace damaged public facilities. (All)
11. Through the Radiological Emergency Preparedness (REP) Program request assistance from the National Nuclear Security Administration (NSSA) which provide fixed- and rotary-wing aircrafts to support radiological environment surveys or research capabilities during a radiological or nuclear incident. (All)
12. REP - Provide information on status of, needs for, and plans for restoration of interdependent structures. (All)

MSP- Michigan Intelligence Operations Center (MIOC)

1. Send suspicious or unusual activities and observations to MDOT and MSP. (Prevent)

Department of Technology, Management, and Budget (DTMB)

1. Maintain a carpool for regular issue vehicles; but does not maintain buses or large mass transportation vehicles. (Protect)
2. Provide vendor information to address security and onsite coordination for mass ground evacuation, as requested. (Respond)
3. Coordinate with ESF 7 to locate a vendor to assist with maritime stakeholders, including USCG. (Respond)
4. Coordinate the use of state facilities and equipment and secures additional mass transportation resources to support emergency operations (see ESF 7). (Respond)
5. Identify and provide departmental transportation assets and support resources when most effective. (All)

Tasks: Federal Government Support Agencies

United States Army Corp of Engineers (USACE)

1. Provide portable bridges as needed. (Respond)
2. Provide appropriate engineering and contracting/procurement personnel and equipment to assist in emergency removal of debris, demolition, repair of roads and bridges, and temporary repair of essential public facilities. (Respond)
3. Provide support in emergency operations and restoration of inland waterways, ports, and harbors. (Recover)
4. Coordinate with other maritime stakeholders and support agencies for mission assignments to prioritize, evaluate, and support restoration of domestic ports, shipping, waterways, and related systems and infrastructures. (Recover)
5. Post-flood relief: emergency channel and bridge debris clearance. (Flood Annex) (Recover)
6. Provide information and assistance concerning the recovery and restoration of transportation critical infrastructure. (Recover)
7. Provide information on status of, needs for, and plans for restoration of transportation infrastructure. (Recover)
8. Assist in the restoring of transportation infrastructure. (Recover)

United States Coast Guard (USCG)

1. Lead efforts to protect marine transportation system from manmade and natural disasters, and acts of terrorism. (Protect)
2. Coordinate with other maritime stakeholders and support agencies for mission assignments to prioritize, evaluate, and support restoration of domestic ports, shipping, waterways, and related systems and infrastructures. (Recover)
3. Inform SEOC about status of maritime domain and marine transportation system. (All)

National Weather Services (NWS)

1. Provide information to support ESF 1 activities, including mass evacuation: (All)
    a. Forecasts, watches, warnings, including weather, storm surge, and dispersion forecasts.
    b. Surface and marine forecasts and nowcasts, including ice and debris tracking.
    c. Emergency hydrographic surveys, search and recovery, obstruction location, and vessel traffic rerouting in ports and waterways.
    d. Remote aerial and orbital imagery through the DOC/NOAA desk.

U.S. Customs and Border Protection (CBP)

1. Provide assets to complement temporarily degraded or disrupted DOT/FAA air navigation services capabilities as requested. (Respond)

United States Department of Transportation (USDOT)

1. Provide assets to address security and on-site coordination for ground operations of mass air evacuation operations, as requested and required. (Respond)

USDOT - Federal Aviation Administration (FAA)

1. Oversee the operation and regulation of the US National Airspace System including during emergencies. (Respond)
    a. May delegate use of specified airspace for national defense, homeland security, law enforcement, and response missions (e.g., search and rescue) but retains control of the airspace at all times.
    b. May implement air traffic and airspace management measures, such as temporary flight restrictions, in conjunction with missions.
2. Management of airspace within and surrounding the disaster-impacted area. (Respond)
3. Provide assets to address security and on-site coordination for ground and in-flight segments of operations of mass air evacuation operations. (Respond)

United States Postal Service (USPS)

1. Collect and report on transportation infrastructure disruption and damages as information is available. (All)

ESF 2: COMMUNICATIONS

Definition/Purpose: The purpose of ESF 2 is to support the restoration of communications infrastructure, coordinate communications support to response efforts, facilitate the delivery of information to emergency management decision makers, and assist in the stabilization and reestablishment of systems and applications during incidents.

Scope: Activities in this ESF support the voice and data communication infrastructure and essential elements of information needs for local, state, tribal, and federal government agencies, as well as nongovernmental organizations, private sector partners, families, individuals, and households, including those with disabilities and access and functional needs. These activities include:

- Providing disaster emergency communications, which consists of the technical means and modes required to provide and maintain operable and interoperable voice and data communications in an incident area.
- Supporting temporary reestablishment of basic public safety communications infrastructures and initial restoration of commercial telecommunications infrastructure.
- Coordinating priority telecommunications services at incident support facilities and providing capabilities and services to aid response and short-term recovery operations.
- Leading communications planning, training, exercising, and coordination of stakeholder capabilities to support whole community disaster response.
- Facilitating delivery of mission critical information to maintain situational awareness for decision makers and supporting elements.
- Developing and maintaining cyber and communications common operating pictures with state, local, and industry partners, and establishing restoration priorities during disasters.
- Coordinating and deconflicting incident radio frequencies in disaster event areas.

Core Capabilities: Operational Communications

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 2 supports almost all Lifelines, however the Lifeline which is most impacted by ESF 2 is the Communications Lifeline.

Other ESF Overlap:
ESF 3: Public Works and Engineering - While ESF 2 describes the systems and methods of communication, ESF 3 is where the infrastructure which allows ESF 2 systems to function is coordinated.
ESF 5: Information and Planning – Many of the communications systems described in this ESF are utilized to inform ESF 5 for situational assessments, incident action planning, and disaster planning. In addition, messaging that is accessible and available for those with access and functional needs, disabilities, or vulnerable populations is coordinated in conjunction with ESF 5.
ESF 12: Energy – Most systems and technology reliant upon electricity is reliant upon ESF 12, which leads ESF 2 especially vulnerable to interruption through ESF 12; without power, most communications systems are non-operational for more than 6-72 hours.
ESF 15: External Affairs – While ESF 2 focuses on the systems and methods which coordinate and enable communications, ESF 15 focuses on the message that is sent through these systems.

Related Plans and Annexes:
Disaster-specific Annex: Cyber Attacks – ESF 2 is intrinsically tied with cyber capabilities utilized for communications, and as such a cyber-attack, which is likely to impact cyber communications, requires coordination with ESF 2.
Disaster-specific Annex: Energy Emergencies – Although not intrinsically tied to ESF 2, an energy emergency often results in the loss of communications which requires ESF 2's involvement.
Disaster-specific Annex: Infrastructure Failure – The failure of communication infrastructure would require ESF 2's involvement. In addition, infrastructure failures in general require communications between internal and external stakeholders.
Disaster-specific Annex: Nuclear Attack – In a nuclear attack, the traditional communication systems utilized by emergency management agencies, first responders, and the media may be inoperable. Alternate communication systems and methods must be utilized by ESF 2 in conjunction with ESF 15 to ensure timely responses and save lives.
Disaster-specific Annex: CBRNE Attack – A CBRNE – Terrorist attack will require prompt messaging coordinated between ESF 2 and ESF 15 to ensure life safety and the possible identification of the threat or perpetrator.
DTMB Publication: Cyber Disruption Response Plan – This plan describes how to reduce the impacts of and respond to major cyber disruption events in and affecting the State of Michigan, which requires significant ESF 2 coordination for cyber responses.

Other Areas of Interest: This ESF includes all aspects of voice and data communications including the alerting, notifying, and warning. It satisfies many of the requirements for the Emergency Management Accreditation Program (EMAP) Standard 4.7 on Communications and Warning. According to that standard an Accredited Emergency Management Program has communications, alert and notification, and warning plans that provide for using, maintaining, and augmenting the equipment necessary for efficient preparation for, response to, and recovery from emergencies/disasters.

Within the MEMP, the following terms are defined as follows:

- Communication: The act of transferring information from one place, person, or group to another.
- Notification: Conveying time-sensitive information on response and recovery-related activities.
- Alert and Warning: Messages that gain the attention of a group(s) of individuals and distribute guidance to prepare for an anticipated incident.
- Higher level stakeholders or emergency personnel: Those at the executive level of state government or the federal government level.
- Lateral-level stakeholders or emergency personnel: SEOC responders, other state level agencies within and outside of Michigan, private sector partners, and voluntary agencies.
- Subordinate-level stakeholders or emergency personnel: Local EOC responders, first responders, and public health staff.
- Internal communication: Communication between State of Michigan (SOM) government personnel.
- External communication: Communication to partners outside of SOM government personnel.

The SEOC provides emergency communications between local jurisdictions and state agencies as well as the federal government.

Tasks: All Agencies

All Agencies

1. Notify ESF2 Lead or the SEOC Communications Unit Leader (COML) of all communications requirements and available assets to eliminate duplication of efforts and ensure prompt provision of services. (Respond)
2. Notify ESF2 Lead or SEOC COMLS of: (Respond)
    a. Any radio frequency devices brought to the incident area.
    b. When communications resources are being withdrawn or discontinued.
    c. When communications resources are no longer needed.
3. Participate in monthly information sharing calls with local partners. (All)

Tasks: Lead Agencies

Department of Technology, Management, and Budget (DTMB)

All subunits under DTMB should be coordinated through the DTMB State Emergency Management Coordinator (SEMC). To contact the DTMB subunits the DTMB SEMC in the SEOC should be contacted.

1. DTMB/Michigan Security Operations Center (MISOC) Monitor SOM networks, systems, and endpoints for signs of cyber-attack or intrusion. (Prevent)
2. DTMB/MISOC maintains situational awareness of potential cyber threats to the SOM and works closely with MSP Cyber Command to address threats. (Protect)
3. Conduct system and application remediation, upgrades, and replacement to mitigate cybersecurity impacts. (Mitigate)
4. Remain aware of communications equipment or functional capabilities that are deployed even if they are deployed with or under a different agency. (Respond)
5. Support teams deployed with voice and data communications. (Respond)
6. Provide IT systems support to state agencies under all circumstances, including crisis or emergency, attack, stabilization, and reestablishment. (Respond)
7. Provide centralized procurement of communications/IT equipment and licensing for state agencies. (Respond)
8. Maintain the following communications systems to support emergency operations. (Respond)
9. DTMB staff assigned to ESF 2 coordinate and prioritize deployable State and Private communication assets and personnel. (Respond)
10. Support State departments and agencies in procuring/coordinating communications services in conjunction with ESF 7. (Respond)
11. Review and implements recommendations identified in incident and exercise after-action reports, risk analysis/hazard identification, and industry best practices. (Mitigate)
12. Coordinate with EMHSD and FEMA to develop appropriate ESF 2 documentation, policies, and procedures for communications. (All)

13. Coordinate with EMHSD and FEMA to develop appropriate ESF 2 documentation, policies, and procedures for communications. (All)
14. Provide technical and maintenance support for communications equipment. (All)
15. Coordinate with private partners and other State/Federal agencies on communications/IT restoration efforts. (Recover)
    a. LEIN, DTMB/MPSCS, MSP Mobile Command Vehicle, National Law Enforcement Telecommunications System (NLETS), NAWAS.
       Provides DTMB or state-owned systems; the content generated by these systems is not the responsibility of DTMB. Provide context and other information through the use of Geospatial Informational System (GIS) and other web-based software systems. (All)

DTMB - Michigan Public Safety Communications System (MPSCS)
The Michigan Public Safety Communications System (MPSCS) is a division of the Department of Technology, Management, and Budget (MDTMB), which primarily handles the communications tasks assigned to MDTMB in day-to-day operations and in times of emergency. DTMB/MPSCS also manages, Monitor, and Maintain the statewide P25 radio system used by federal, state, local and tribal agencies.

1. Act to achieve, maintain, and enhance interoperable emergency communications capabilities; support and promote ability of emergency response providers and government officials to communicate in the event of disasters, acts of terrorism, or man-made disasters. (Prevent)
2. Coordinate planning and provision of national security/emergency preparedness communications for State Government under all circumstances, including crisis or emergency, attack, stabilization, and reestablishment. (Prevent).
3. Assist federal, state, local, and tribal agencies operating in Michigan with interoperable emergency communication planning and exercises. (Prevent)
4. DTMB/Network Communication Center (NCC) Monitor and Protect the DTMB/MPSCS with 24/7 coverage. (Protect)
5. Implement industry standards and controls in system design and interconnection, conduct system technical analyses and coordinate with the FCC and other governing bodies. (Protect)
6. Conduct routine system upgrades and maintenance to keep the DTMB/MPSCS system up to data with industry standards. Perform remediation of known issues to mitigate possible system impacts. (Mitigate)
7. Support short term-restoration assistance to local and tribal area government emergency communications. (Respond)
8. Provide support to ESF 2 at local, tribal, and/or federal operations as approved and requested upon; to include personnel, equipment, technical assistance. (Following ICS policies and procedures and communications). (Respond)
9. Train and deploy personnel to support ESF 2 Operations. (Respond)
10. Assign radio operators to staff the radio equipment at the SEOC. (Respond)
    a. AUXCOMM is the primary agency assigned to staff the radio equipment at the SEOC at the request of the Communications Unit in the SEOC.
    b. MSP Communications and others as needed.
11. Provide personnel to assist in communications missions. (Respond)
    a. COML, Communications Technician (COMT) to support firefighters, law enforcement officers, and incident response operations.
    b. Engineers, technicians, and liaison staff.
    c. Communications officer to accompany radio systems for user training and operator maintenance.
    d. Frequency Managers (State and FEMA/NCC level) for the use of state radio frequencies.
12. Provide DTMB owned communications equipment and services to responders as needed or required such as: (Respond)
    a. Communications on Wheels (COW)/Site on Wheels. (SOW)
    b. Radio caches.
    c. Phones and Mobile smart devices.
    d. Laptops.
    e. Printers, Multifunction devices, and Plotters.
    f. Email accounts.
    g. Office Productivity and Collaboration Software.
13. Coordinate State radio frequency interoperability. Resolves radio frequency use conflicts. (All)

Tasks: State Government Supporting Agencies

Michigan Department of Agriculture and Rural Development (MDARD)

1. Issue agricultural advisories, orders, and embargoes as outlined in the MDARD Emergency Management Plans Manual. (Protect)
2. Maintain limited internal communications capabilities including: (Respond)
    a. A limited 800 MHz radio cache that can be integrated with existing statewide radio communications systems to support firefighters, law enforcement officers, and incident response operations.
    b. A Communications officer who administers radio systems for user training and operator maintenance.
3. Communicate and coordinate with federal authorities in promoting federal assistance related to agricultural damage, farmers, and related food enterprises. (Respond)

Michigan Department of Environment, Great Lakes, and Energy (EGLE)

1. Administer the Pollution Emergency Alerting System (PEAS). Ensure releases to the environment are responded to in a timely manner and threats to human health and the environment are mitigated against. (Protect)
2. Work with MDHHS and local health departments to ensure Michigan Health Alert Notifications (MIHAN) alerts are issued for releases to source drinking water. (Respond)
3. Provide imagery and data through an Unmanned Aerial System (UAS) program. (Respond)

Michigan Department of Health and Human Services (MDHHS)- Health

1. Issue health advisories and protective action guides to the public. (Protect)
2. Coordinate the state public health communications response with local public health and healthcare partners by sharing public health emergency information via social media, websites, and other outreach tools. (Respond)
3. Maintain a tactical communication capability for public health emergencies. (Respond)
4. Utilize EMSystem/EMResource to allow real time status of incident specific data for surge capacity. (Respond)
5. Utilize the MI Volunteer Registry to communicate with volunteers. (Respond)
6. Utilize Community Health Emergency Coordination Center (CHECC) Communications systems to support the MI MORT. (Respond)
7. Provide liaisons to the federal Individuals and Households Program. (Recover)
8. Maintain Michigan Health Alert Network (MIHAN). (All)
9. Maintain liaison with local government and volunteer human service agencies. (All)

LARA - Michigan Public Service Commission (MPSC)

1. Protection of underground Facilities Act/ MISS DIG Program. (Prevent)
2. Require electric and natural gas utilities to report on cybersecurity plans (training, threats, workforce, etc.) annually. (Prevent)
3. Require electric and natural gas utilities to inform the MPSC and MIOC of significant cybersecurity incidents (as defined in MPSC rules). (Prevent)
4. Monitor and reports on the assessment, repair, and restoration of damaged energy and telecommunications infrastructure. (Respond)
5. Per Energy Security Plan, issue fuel specification waivers as needed. (Respond)
6. As appropriate, work with the MSP/EMHSD to communicate restoration priorities to electrical service providers to facilitate statewide incident recovery. (Recover)

Michigan Department of Military and Veterans Affairs (MDMVA)

1. MDMVA maintains the following equipment to support communications within the agency: (Protect)
    a. Self-Supporting voice and data structure.
    b. Mobile voice and data. (FirstNet Band 14)
    c. 800 MHz Radios.
    d. RAVE Mass Notification system for internal messaging of staff (Army).
    e. Satellite telephone, messaging, and GPS tracking.
2. May deploy personnel to support ESF2 functions (as invited). (Respond)
3. Respond to cyber threats and disruptions. (Respond)
4. Provide secure and non-secure communications support (voice, video, data) for mobilizations of resources during existing or potential emergency conditions. (Respond)
    a. 800 MHz radios, satellite telephones, messaging, and Global Positioning System (GPS) tracking are available for internal use and deploying to other responders.
5. Establish and maintain interoperable communications with local, state, and federal agencies and volunteer organizations as necessary to respond to domestic operations. (Respond)
6. Layer in unique equipment, as required, to allow interface with federal, state, and local emergency response agencies in support of domestic security missions and disaster response. (Respond)

Michigan Department of Natural Resources (MDNR)

1. The MDNR Law Division utilizes the DTMB/MPSCS 800 MHz and Computer Aided Dispatch (CAD) systems for dispatching conservation officers statewide from the Communication Center located in Lansing. (Respond)
2. The MDNR Communications Center can support MSP dispatching when MSP center(s) are not available. (Respond)
3. MDNR Law and Fisheries personnel utilizes the DTMB/MPSCS 800 MHz System and a VHF radio system to communication with United States Coast Guard (USCG) and other vessels on the Great Lakes. (Respond)
4. MDNR Fire Management personnel utilizes the MSPCS 800 MHz and VHF radios systems to communicate with local, federal, and tribal fire departments and the MDNR incident coordination centers located in Roscommon and Marquette. (Respond)
5. MDNR GIS specialists collect, manage, analyze, model, and present geographic or spatial data. The GIS equipment is owned by DTMB however the operation and content therewithin is created by the MDNR. (Respond)
6. MDNR Fire Management has two mobile command center trailers with radio communication capability, generators, and hard wired (if available) or wireless internet capability that could be utilized to support any disaster. (Respond)
7. Provide trained personnel to assist in communications missions. (Respond)

Michigan Department of State Police (MSP)

1. Notify the SEOC ESF2 Lead or COML of all communications requirements and assets deployed to the incident area. (Respond)
2. Provide communications support to state response/recovery facilities within the disaster response area. (Respond)
3. Provide training to field staff and local responders on the DTMB/MPSCS radio system. (Protect)
4. Maintain Mobile Command vehicles and communication support trailers that can provide onsite communications support including dispatch, tactical repeaters, data, and cellular and satellite phone capabilities. (Respond)
5. Coordinate with cellular providers to deploy mobile cellular towers to event areas. (Respond)
6. Michigan Cyber Command Center (MC3) coordinates the combined efforts of cyber emergency response during critical cyber incidents in the state. (All)
7. MSP Regional Communications Centers provide direct communications and operational support to MSP field units and specialty teams. (Respond)
8. MSP Regional Communications Centers serve as the primary or secondary 9-1-1 Wireless Public Safety answering Point (PSAP) for some local response agencies throughout the state. (Respond)
9. MSP 911 Administration Office is a statewide point of contact for PSAPs in Michigan to facilitate planning, training, exercising, and information sharing to prepare for and respond to emergencies, disasters, and planned events. (Prevent)
10. MSP 911 Administration Office coordinates Public Safety Answering Point (PSAP) involvement, when necessary, for emergency communications and public safety needs during emergencies and planned events. (Respond)
11. DTMB Assist MSP's Criminal Justice Information Center (CJIC) in maintaining the following statewide communications and notification systems: (Respond)
    a. *Law Enforcement Information Network (LEIN)*: MSP Operations uses the LEIN for dissemination of emergency information to other LEIN users throughout the state, including affected MSP divisions.
    b. *National Law Enforcement Telecommunications System (NLETS)*: The MSP uses the NLETS to exchange interstate law enforcement and public safety related information.
12. MSP Operations uses the following systems for disseminating incident communications, notifications, and alerts and warnings to emergency facilities and personnel statewide: (Respond)
    a. *National Attack Warning and Alert System (NAWAS)*: MSP Operations is connected to 5 primary warning points located at selected MSP posts. Each warning point is equipped with the standard NAWAS equipment consisting of a telephone with a push to talk handset, alert, and speaker. The primary warning points are responsible for disseminating emergency information to other local warning points. The dissemination of attack warning and other warning information via NAWAS is guided by MSP Official Order No. 3.

NAWAS Warning Points in Michigan

National Warning Center/National Weather Service ▼	
State Warning Point – MSP Operations ▼	Alternate State Warning Point* – MSP/EMHSD Alternate SEOC ▼
Primary Warning Points (5): Second District Regional Dispatch MSP Paw Paw MSP Post Negaunee MSP Post St. Ignace MSP Post Gaylord Central Dispatch MSP ▼	
Secondary Warning Points (fan out continued as per dissemination list) ▼	

*The Alternate State Warning Point will relay warning in the event the primary State Warning Point is inoperable or otherwise unavailable.

b. *National Weather Wire Service (NWWS)*: MSP Operations receives information on severe weather watches and warnings, travel advisories, and road closings via the National Weather Wire Service – Open Interface (NWSS-OI) on the internet. This information is forwarded to the affected areas via the LEIN.
c. *LEIN*: MSP Operations utilizes the LEIN for dissemination of warning and emergency information to other LEIN users throughout the state, including affected MSP divisions.
d. *Integrated Public Alert and Warning System (IPAWS) Alerting Software*: MSP Operations uses IPAWS Alerting Software at the direction of the Governor or the SDEM or their designee. Emergency Alert System (EAS) and Wireless Emergency Alerts (WEA) messages are broadcast via IPAWS to warn residents of imminent dangers and to advise what protective actions they can take to ensure the safety of themselves and their property. MSP Operations may also assist local emergency managers in disseminating emergency broadcasts within their jurisdiction.
e. *Telephone*: MSP Operations notifies, via telephone, the MSP/EMHSD Duty Officer, other appropriate departmental personnel, affected state departments/agencies, and others deemed necessary for the immediate situation.
f. *Email*: MSP Operations can use email to transmit incident related information to the MSP/EMHSD Duty Officer, other appropriate departmental personnel, affected state departments/agencies, and others deemed necessary for the immediate situation.
g. *DTMB/MPSCS 800 MHz Radios*: MSP Operations uses DTMB/MPSCS 800 MHz radio for communicating with MSP posts and other department facilities.

13. The MSP Michigan Intelligence Operations Center (MIOC) utilizes the following systems for disseminating warning or emergency information on potential or imminent terrorism threats: (Respond)
    a. *LEIN*: The MIOC utilizes the LEIN for dissemination of potential or imminent terrorist threat information to other LEIN users throughout the state, including affected MSP divisions.
    b. *Telephone*: The MIOC notifies, via telephone, the MSP/EMHSD command staff and/or Duty Officer, other appropriate MSP personnel, and others deemed necessary for the immediate situation, of potential or imminent terrorist threats.
    c. *Email*: The MIOC utilizes email and dedicated distribution lists to transmit information on potential or imminent terrorist threats to all appropriate MSP and other state or local emergency personnel.
    d. *Web/Social Media Sites*: In coordination between the MSP Public Affairs Section and the MIOC, threat information can be posted on the MSP intranet site for viewing by all MSP work units. In addition, threat information can also be posted on the MSP public web site and social media sites for dissemination to the public.
    e. *Hardcopy*: The MIOC may provide hardcopy terrorist threat information to appropriate MSP staff and others deemed necessary for the immediate situation.

1. Coordinate planning and provision of emergency preparedness communications for SEOC response under all circumstances, including crisis or emergency, attack, stabilization, and reestablishment. (Prevent)
2. Coordinate with ESF2 partner agencies to develop SEOC ESF 2 documentation, policies, and procedures. (Protect)
3. Maintain and engage various systems in the SEOC for communicating, notifying, alerting, and warning higher, lateral, and subordinate emergency personnel, stakeholders, and the public: (Respond)
    a. *Telephone – Landline*: Used to notify and communicate with the Executive (Governor's) Office, appropriate state departments/agencies, affected local governments, Federal Emergency Management Agency (FEMA), adjacent states, and Canada, as necessary.
    b. *Telephone – Cellular*: MSP/EMHSD staff have cellular telephones to be able to conduct emergency response operations remotely. They are used to notify and communicate with the Executive (Governor's) Office, appropriate state departments/agencies, affected local governments, FEMA, adjacent states, and Canada, as necessary.
    c. *Telephone – Satellite*: MSP/EMHSD maintains two satellite phones in the SEOC that can be used in fixed or mobile mode and four additional mobile satellite phones that may deployed during emergency response operations. These are used as a backup mode of communication when cellular and landline phones are unable to be used.
    d. *Telephone – Secure*: The Department of Homeland Security, FEMA, FBI, and other appropriate federal departments/agencies may communicate with the MSP/EMHSD and other state departments/agencies via secure telephone for the purpose of relaying information/warning on actual, imminent, or potential terrorism situations.
    e. *Email*: Used to notify and communicate with the Executive (Governor's) Office, appropriate state departments/agencies, affected local governments, FEMA, adjacent states, and Canada, as necessary. There are specific SEOC position specific email addresses that are used to maintain consistent communication during a response.
    f. *iPads*: MSP/EMHSD maintains a cache of iPads that are used to collect damage assessment information during disasters and communicate that information into the GIS to be tallied and reviewed.
    g. *MI CIMS*: The MSP/EMHSD utilizes the Michigan Critical Information Management System (MI CIMS) in the SEOC to broadcast information about imminent or actual threats or incidents to all MI CIMS users across the state.
    h. *Mass Notification Software*: The MSP/EMHSD uses a mass notification software to issue notifications to responders to activate the SEOC.
    i. *Facsimile*: The SEOC has two facsimile machines to send hard-copy communications over telephone lines. (Additional facsimile machines can be installed as needed to meet the demands of the situation.)
    j. *Collaboration Software:* The voice, video, and text communication capabilities are used to communicate with higher, lateral, and subordinate emergency personnel and partners
    k. *IPAWS alerting software*: Used to issue statewide alerts and warnings as directed by the Governor's office or other executive level state officials.
        a. Ability to issue Emergency Alert System (EAS) messages via television and radio.
        b. Ability to issue Wireless Emergency Alerts (WEA) via cellular telephones.
        c. Issuing emergency alerts and warnings through IPAWS allows for both English and Spanish alerts to be disseminated.
        d. IPAWS uses Common Alerting Protocol standards which allows for emergency alerts to be received by devices used by those with access and functional needs.
    a. *DTMB/MPSCS 800 MHz Radios*: A bank of 800 MHz DTMB/MPSCS radios are located in the SEOC. There are also some radios at the Alternate SEOC at the Emergency Management and Homeland Security Training Center (EMHSTC). The DTMB/MPSCS 800 MHz radio system allows communications with various state field staff as well as local responders.
    l. *Geographic Information System (GIS)*: GIS is used in the SEOC to visualize and share disaster-related data with local, state, and federal responders.
    m. *FEMA National Radio System (FNARS)*: The FNARS is a two-way, 1000-watt voice radio transceiver capable of transmitting between the SEOC and FNARS communication centers located throughout the country. This system is a support warning system when telephone lines are inoperable.
    n. *NAWAS*: The MSP/EMHSD Alternate SEOC functions as the Alternate State Warning Point for the NAWAS. The MSP/EMHSD provides backup NAWAS facilities for MSP Operations during emergencies and will disseminate warnings to the 10 primary warning points when needed.
    o. *SHAred RESources High Frequency Radio (SHARES)*: The SEOC has one station for voice communication, and a second station for data communication including Winlink.

p. *Web/Social Media Sites*: As appropriate, threat/incident information can be posted on the MSP intranet site for viewing by all MSP work units. In addition, threat/incident information can also be posted on the MSP/EMHSD public web site and MSP social media sites for dissemination to the public.
q. *VaporStream*: System used by the Fermi and DC Cook nuclear power plants to send plant status alerts and documents to the SEOC and associated counties. Notifications are received via a tablet in the SEOC, and confirmation of receipt is automatically transmitted back to the plant.
r. *INFORM*: System used by the Palisades nuclear power plant to send plant status alerts and documents to the SEOC and associated counties. Notifications are received via a tablet in the SEOC, and confirmation of receipt is automatically transmitted back to the plant.

4. Coordinate with MDTMB for any required state-level communication support. (Respond)
5. Coordinate the collection and dissemination damage assessment information via communications tools and systems such as iPads, MI CIMS, and GIS. Additionally, coordinate communications resources during state damage assessments (Respond)
6. Liaison with affected local jurisdictions through a variety of communications pathways. (Respond)
7. Post recovery information on the State of Michigan website and appropriate social media outlets. (Recover)
8. Hosts regular informational and response coordination calls with local emergency managers to provide situational awareness to local responders. Relevant state agency personnel are also engaged in this communication outreach. (Respond)

Michigan Department of Transportation (MDOT)

1. Maintain and engage various systems for communicating, notifying, alerting, and providing warning regarding relevant transportation issues to personnel, stakeholders, and the public: (Respond).
    a. Telephone – Cellular.
    b. Telephone – Landline.
    c. Email.
    d. iPads.
    e. MI Drive
    f. CodeRED.
    g. Facsimile.
    h. Microsoft Teams voice, video, and text communication capability.
2. MDOT has cameras throughout Metro Detroit that are monitored 24/7 to provide information back to the Intelligent Transportation office and may dispatch emergency responders as needed and relay information to motorists through the dynamic message signs. (All)
3. MDOT owned or operated dynamic message boards (portable and permanent) may be used for public messaging in certain situations. (All)

NOTE: MDOT only uses CodeRED to receive information from MSP/EMHSD and the SEOC.

Tasks: Federal Government Support Agencies

Federal Government Systems and Services

The Federal Government maintains several systems and services that federal, state, and local agencies may have access to which provides redundancy to their communications, notifications, alert, and warning systems.

The SEOC and agency responders has access to the following systems:

1. **National Attack Warning and Alert System (NAWAS):** The NAWAS is managed by the Federal Emergency Management Agency (FEMA). The NAWAS is designed to alert government, industry, and the public to the threat of enemy attack and to report peacetime disasters such as severe weather conditions. The NAWAS is a voice communications system similar to a telephone party-line circuit, and warnings can be disseminated to all NAWAS warning points simultaneously. The NAWAS provides attack warning from the National Warning Center located at the North American Air Defense Headquarters in Colorado Springs, Colorado, and from the National Weather Service to governmental departments/agencies as warning points throughout the country.
2. **National Weather Wire Service (NWWS):** The National Oceanic and Atmospheric Administration (NOAA) transmits weather information, including watches and warnings, through the National Weather Wire Service Open Interface (NWSS-OI) on the internet.
3. **FEMA National Alert Radio System (FNARS):** The FNARS is a two-way, 1000-watt voice radio transceiver capable of transmitting between the SEOC and FNARS communication centers located throughout the country. This system is a support warning system when telephone lines are inoperable.
4. **Homeland Security Information Network (HSIN):** HSIN is managed by the United States Department of Homeland Security (US DHS). The HSIN is a trusted network for homeland security mission operations to share sensitive but unclassified information. Federal, State, Local, Tribal, and private sector partners can use HSIN to

manage operations, analyze data, send alerts and notices, and share the information they need to perform their duties.

5. **Government Emergency Telecommunications (GETS):** GETS is managed by the Cybersecurity and Infrastructure Security Agency (CISA). The GETS supports national leadership; federal, state, local, tribal, and territorial governments; first responders; and other authorized national security and emergency preparedness (NS/EP) users. It is intended to be used in an emergency or crisis situation when the landline network is congested and the probability of completing a normal call is reduced.
6. **Wireless Priority Service (WPS):** WPS is managed by CISA. WPS supports national leadership; federal, state, local, tribal, and territorial governments; and other authorized NS/EP users. It is intended to be used in an emergency or crisis situation when the wireless network is congested and the probability of completing a normal call is reduced.
7. **Secure Communications:** The US DHS, FEMA, and other appropriate federal departments/agencies may communicate with the MSP/EMHSD and other state departments/agencies via secure telephone for the purpose of relaying information/warning on actual, imminent, or potential terrorism situations.
8. **Telecommunications Service Priority (TSP):** TSP is managed by CISA. TSP is a program that authorizes NS/EP organizations to receive priority treatment for vital voice and data circuits or other telecommunications services.
9. **Communication Assets Survey and Mapping (CASM) Tool:** CASM is managed by CISA. It is the primary resource, nationwide, for the emergency communications community to inventory and share agency, asset, and COMU information, for the purpose of planning public safety communications operability and interoperability.
10. In an actual or potential incident, the following systems are used to communicate pertinent preparedness or response information:
    a. **National Incident Communications Conference Line (NICCL):** A standing conference line designated, maintained, and supported by DHS Public Affairs as the primary means for interagency incident communications information sharing during an incident requiring Federal coordination.
    b. **State Incident Communications Conference Line (SICCL):** A dedicated Federal-state incident communications conference line.
    c. **Private Sector Incident Communications Conference Line (PICCL):** A standing line to provide timely information to critical infrastructure communicators.

Cybersecurity and Infrastructure Security Agency / Emergency Communications Division (CISA/ECD)

1. Lead the Nation's operable and interoperable public safety and national security and emergency preparedness (NS/EP) communications efforts. (Respond)
2. Provide training, coordination, tools, and guidance to help its federal, state, local, tribal, territorial, and industry partners develop their emergency communications capabilities and plans. (Protect)
3. Work with stakeholders and regional personnel to document best practices and lessons learned to promote improvements in emergency communications during future events. (Protect)
4. Manage priority telecommunications programs that support emergency communications and communications restoration. (Respond)

Federal Emergency Management Agency Disaster Emergency Communications (FEMA/DEC)

1. Assess and addresses survivability, sustainability, and interoperability of local emergency communications systems to meet the goals of the National Emergency Communications Plan (NECP). (Protect)
2. Assist State, Local, Tribal, and Territorial entities in mitigating their disaster emergency communications risks and requirements to support life-saving efforts, protect property, and coordinate response and recovery operations. (Mitigate)
3. Enable effective and efficient Federal disaster response and recovery by providing Operational Communications support (voice, video, and data) to first responders in coordination with other mission partners, stakeholders, and survivors. (Respond)
4. Deploy, installs, operates, Maintain, and Protect telecommunications, logistics, and operations assets in support of planned special events and in response to disasters, assist residents and visitors and first responders. (Respond)
5. Provide disaster emergency communications through six geographically dispersed Mobile Emergency Response Support (MERS) detachments and a pre-positioned fleet of Mobile Communications Office Vehicles. (Respond)
6. Assist with identification and coordination of resources required for long-term restoration of critical infrastructure, key resources, and community lifelines. (Recover)
7. Enable interoperable communications to ensure coordination and collaboration among Federal, State, Tribal, Territorial, and Local (F/S/T/T/L) governments, as well as the private sector and non-governmental organizations. (Respond)

FirstNet Authority
Housed within the Department of Commerce, National Telecommunications and Information Administration (NTIA), the First Responder Network (FirstNet) Authority is the federal entity charged with overseeing the creation and delivery of the FirstNet network.

1. Work with state and local partners to develop a Response Operations Guidebook outlining coordination and support between the entity and the FirstNet Authority. (Protect)
2. Develop, builds, and operates the nationwide, broadband network that equips first responders to save lives and protect U.S. communities. (Respond)
3. Provide deployable network assets and coordination. (Respond)

National Oceanic and Atmospheric Administration (NOAA) - National Weather Service (NWS)
1. Issue hazardous weather warning notifications (flood, severe, winter, fire, marine, etc.). (Respond)
2. Maintain NWSChat which is an instant messaging program utilized by NWS operational personnel to share critical warning decision expertise and other types of significant weather information essential to the NWS's mission of saving lives and property. (Respond)
3. Maintain the Emergency Managers Weather Information Network (EMWIN) which provides emergency managers, public alerting services, and the public quick and free access to a defined set of NWS warnings, watches, forecasts, and other products. (All)
4. Maintain the Interactive Weather Information Network (IWIN) Provide interactive weather information to the public. The maps and graphics supply local weather, national weather and warnings, and world weather, while additional information can be found through various links and videos of weather events. (All)
5. Maintain the National Weather Wire Service (NWWS) through the National Oceanic and Atmospheric administration (NOAA), using the National Weather Wire Service Open Interface (NWSS-OI). NWWS provides television and radio broadcasters, emergency managers, commercial / private alerting services, and the general public the fastest receipt of current weather information, alerts and warnings sent in text format from the local NWS Weather Forecast Offices and National Centers. (All)
6. Maintain the National Weather Radio (NWR) nationwide network of radio stations broadcasting continuous weather information direct from a nearby National Weather Service (NWS) office. NWR broadcasts NWS warnings, watches, forecasts, and other hazard information 24 hours a day. In conjunction with the Emergency Alert System (EAS), NWR provides an all-hazards radio network, making it a single source for comprehensive weather and emergency information. The Secretary of Homeland Security (or President) can use the NWR network to send target alerts anywhere in the country. In addition, this type of activation also activates DHS/FEMA's EAS network at the local level. NWR also broadcasts warning and post-event information for all types of hazards, including natural (e.g., earthquakes and volcano activity), manmade (e.g., chemical or environmental incidents), and terrorism-related hazards. (All)
    a. Local EMCs can request assistance for issuing alerts through the NWR system.

Tasks: Other Supporting Entities
Auxiliary Communications (AUXCOMM)
AUXCOMM is an umbrella term for a group of volunteer-based communications experts and specialists which assists in responding to and recovering from disasters by utilizing their skills and knowledge in communications.
1. Statewide AUXCOMM coordinator works with the SEOC COML to determine communication needs for the incident, and to establish voice and/or data circuits as needed in order to provide communication support between the SEOC and the local emergency management agency. (Respond)
2. Statewide AUXCOMM coordinator works with member organizations to facilitate communications via voice and/or data utilizing a variety of modes and bands. Member organizations include Civil Air Patrol (CAP), Salvation Army Team Emergency Radio Network (SATERN), American Red Cross (ARC), Central Michigan Emergency Network (CMEN), REACT, and other organizations as needed. (Respond)
3. Provide personnel support to SEOC ESF 2 operations as requested. AUXCOMM communications personnel resources include: (Respond)
4. The Communications Room at the SEOC is equipped with a variety of equipment to enable communication with each of the county's AUXCOMM stations as needed. Equipment includes: (Respond)
    a. High Frequency (HF) radios for statewide voice and data communication.
    b. Very High Frequency (VHF) and Ultra High Frequency (UHF) radios for voice communication via Frequency Modulation (FM), Digital Smart Technologies for Amateur Radio (D-STAR), and Digital Mobile Radio (DMR).
    c. Winlink (radio-based email) over HF and packet radio.

5. National Telecommunications and Information Administration (NTIA) frequencies available for voice and data at both the SHARES station and via CAP stations, enabling transmission of encrypted data over the air as needed. (Respond)
6. CAP may provide voice and data capabilities at the SEOC in the HF bands on designated NTIA frequencies. (Respond)
7. Provide communication support to local, tribal, and territorial first responders as requested and approved. (Respond)
8. Provide communications and Information Technology (IT) support to state Response/recovery facilities within the area of operations as requested and approved. (Respond)
9. CAP READYOP system allows for remote coordination of CAP operations across the state via a combination of VHF, UHF, and internet capabilities. A READYOP node is available in the SEOC and throughout the state. (Respond)
10. Provide short term-restoration support to local, tribal, and territorial government emergency communications, as requested. (Recover)

Michigan Association of Broadcaster's (MAB)
The Michigan Association of Broadcasters (MAB), with oversight of the State Emergency Communications Committee (SECC), is responsible for the proper operation of the Emergency Alert System (EAS) that radio and television broadcasters and cable companies participate in. EAS provides direct dissemination of alerts and warnings to the public. The purpose of the SECC is to oversee the implementation of state emergency communications plans at the state and local levels. The SECC is chaired by a Michigan broadcast industry representative.

1. Develop emergency communications plans that comply with Federal Communications Commission (FCC) EAS rules. (Protect)
2. Develop authentication procedures for activating state emergency communications plans. (Protect)
3. Provide assistance to the broadcast and cable industries in developing emergency communications plans. (Protect)
4. Maintain liaisons with businesses, organizations and public service entities in the state that require emergency communications. (Protect)
5. Encourage research to improve the overall effectiveness of emergency communications within the state of Michigan. (Protect)
6. Provide technical advice to state and local authorities and private organizations within the state concerning emergency communications. (Respond)
7. Provide assistance to the SEOC Public Information Officer (PIO), when possible, to facilitate dissemination of vital information to the public through broadcasters that may not require EAS activation. (Respond)

Private Sector Communications Partners:
Private sector partners include but are not limited to cellular network providers (AT&T, Verizon, T-Mobile, etc.), satellite providers, and local internet and cable providers.

1. Provide resilient infrastructure to support commercial communications (voice and data) networks. (Prevent)
2. Restore public safety communications systems and first responder networks and infrastructure, as needed. (Respond)
3. Provide deployable assets (devices, temporary networks, equipment, etc.) (Respond)
4. Some cellular providers provide secure, reliable, priority connectivity to emergency responders. (Respond)

ESF 3: PUBLIC WORKS AND ENGINEERING

Definition/Purpose: The purpose of ESF 3 is to coordinate and organize the resources of the State government to facilitate the delivery of multiple core capabilities.

Scope: Activities in this function are intricately linked with critical infrastructures, including those used to support other ESFs. The primary functions of ESF 3 include:

- Providing pre- and post-incident assessments of public works and infrastructure.
- Executing emergency contract support for life-saving and life-sustaining services.
- Providing technical assistance, including engineering expertise and construction management.
- Contracting and real estate services.
- Providing emergency repair of damaged public infrastructure and critical facilities.

Core Capabilities: Infrastructure Systems, Critical Transportation, Environmental Response/Health and Safety, Logistics and Supply Chain Management, Fatality Management, Mass Care Services, Mass Search and Rescue Operations.

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 3 supports almost all Lifelines.

Other ESF Overlap:
ESF 1: Transportation – The roads, bridges, railroad lines and stations, and physical infrastructure which supports the transportation systems described in ESF 1 are outlined in this ESF.
ESF 2: Communication – The cell phone towers, internet cables, and radio towers which create the communications systems described in ESF 2 are outlined in this ESF.
ESF 10: Oil and Hazardous Materials – The pipelines and other infrastructures which transport oil and hazardous material are discussed in this ESF and in ESF 1 but are primarily housed in ESF 10.
ESF 12: Energy – The power lines, transfer stations, and other similar infrastructures which support ESF 12 are outlined in this ESF.
ESF 14: Cross Sector Business and Infrastructure – Many critical infrastructures and key resources in Michigan are privately owned and operated, and as such, coordination between the private and public services.

Other Plans and Annexes:
Disaster-specific Annex: Cyber Attacks – Although not directly linked, ESF 3 is often impacted by cyber-attacks. A cyber-attack may impact infrastructure by targeting monitoring and operational systems or may impact the cyber infrastructure itself.
Disaster-specific Annex: Energy Emergencies – Although not directly linked, often energy emergencies are initiated by a failure or impact to an infrastructure in ESF 3.
Disaster-specific Annex: Infrastructure Failures – ESF 3 is directly linked with infrastructure failures and requires coordination with ESF 3 and various other ESFs to respond to and recover from infrastructure failures.
Disaster-specific Annex: Nuclear Power Plant Incidents – A nuclear power plant incident often requires the coordination of ESF 3 for engineering expertise.
Disaster-specific Annex: Oil and Gas Well/Pipeline Incidents – Oil and gas wells and pipelines are an infrastructure which requires close coordination between ESF 3 and 10 when incidents occur.
MSP/EMHSD Publication 101d: Emergency Recovery Support Plan – Many areas requiring repair and engineering consultation will require continued assistance through short- and long-term recovery, thus closely linking ESF 3 with the Infrastructure Systems Recovery Support Function.
MSP/EMHSD Publication 901: Damage Assessment Handbook – Damage assessment is intrinsically linked with ESF 3 because the damage assessment function is housed within this ESF. Further, engineering expertise is often required for damage assessment in cases involving public infrastructure.

Other Areas of Interest:
Shoreline Cleanup Assessment Team (SCAT) – Typically led by a federal agency such as U.S. Fish and Wildlife in response to an oil spill, state agency members augment the team and participate in a process designed to assess oiled shorelines. SCAT surveys include systematic documentation using standard terms and definitions of the shoreline in areas affected by the spill, with information disseminated to planners and decision-makers. A SCAT could also be led by other federal agencies, such as the USCG, EPA, etc.

Tasks: All Agencies

1. Provide appropriate personnel for assessment functions.
2. Provide assessment information on damaged state facilities and impacted state functions.

3. Provide photographic documentation of emergency or disaster-related damage.
4. Monitor and report damage and impacts to critical private sector facilities, infrastructure, and systems

Tasks: Lead Agency

Department of Environment, Great Lakes, and Energy (EGLE)

1. Identify, and Provide safety guidance for, areas affected by hazardous materials with support of MDHHS and MIOSHA. (Prevent)
2. Assist in determining the operating status of water and wastewater systems. (Protect)
3. Oversee infrastructure protection activities for drinking water and water treatment agencies in the water sector. (Protect)
    a. Assist in identifying critical water and wastewater needs, including personnel, electrical power, and treatment chemicals.
4. Aid solid waste agencies regarding municipal solid waste landfills and construction and demolition of waste landfills. Provide technical assistance for nonhazardous waste management including debris management and recycling/reuse opportunities. (Protect)
5. Minimizes environmental damage and contamination, especially when due to contamination of drinking water supplies or through disaster debris management. (Respond)
6. Supply engineering and environmental health personnel to assist in conjunction with the EPA in assessing the status of water, wastewater, and solid waste facilities. (Respond)
7. Provide engineering support to assist in evaluating damage to water control systems, such as dams, levees, and water delivery facilities and structures. (Respond)
8. Assist investigation and intelligence analysis for hazardous materials incidents involving contaminated water and wastewater systems, pursuant to existing state and federal authorities. (Respond)
9. Assist in temporary protection for essential public facilities, water supply, and sanitation. (Respond)
10. Provide technical assistance, project management, and engineering expertise support during response activities, and coordinate with DTMB and MDNR for construction management and resources. (Respond)
11. Provide support personnel, tools, and other resources to support ESF 3. (Respond)
    a. Including technical personnel to evaluate damage to dam control facilities.
12. Coordinate salvage and wreck removal operations by contracting with DTMB; Provide expertise and Support specialized salvage/wreck removal operations as part of a coordinated response and restoration strategy; including salvage/wreck removal operation coordination beyond water operations. (Respond)
13. Assist in vessel salvage and removal of vessel debris (technical assistance, monitoring, and other support). (Respond)
14. Provide situational awareness and prioritized recommendations for the stabilization and reestablishment of associated critical infrastructure sectors supported by this ESF. (Respond)
15. Provide debris management technical assistance. (Respond)
16. Provide personnel to assist in damage assessment, structural inspections, debris clearance monitoring, and restoration of facilities. (Respond)
17. Oversee oil and hazardous substance pollution response operations associated with debris removal/salvage operations. (Respond)
18. Provide technical assistance for CBRNE blasts or explosions that may create a threatening agent in contaminated debris field. (Respond)
19. Provide expertise on waste and debris disposal options. (Respond)
20. Coordinate the assessment, repair, and restoration of damaged dams, water supply systems, and wastewater collection and treatment facilities. (Recover)
21. Review permits for repair and restoration of transportation used for the transport of contaminated materials. (Recover)
22. Assist radiological contaminated debris management activities by coordinating and/or providing resources, assessments, data, expertise, technical assistance, monitoring, and other appropriate support. (Recover)
23. Provide engineering and contracting/procurement personnel and equipment to assist in emergency removal of debris, demolition, temporary protection for temporary protection of essential public facilities, water supply, and sanitation. (Recover)
24. Oil, Gas, and Mineral Department (OGMD) monitor and report on private oil and gas well (gathering line) accidents. (All)
25. Assist solid waste agencies with assessments of staging/storage areas, solid waste facilities, and wastewater facilities; environmental sampling and monitoring; inspections, resources, data, and other support. (All)
26. Assist in determining the sustainability for human consumption of water from local sources and identifying hazardous materials having the potential to affect drinking water supplies. (All)
27. Assist in identifying critical water and wastewater needs, including personnel, electrical power, and treatment chemicals. (All)

Tasks: State Government Support Agencies

Michigan Department of Agriculture and Rural (MDARD)

1. Identify locations of/Provide safety guidance for areas affected by hazardous materials. (Prevent)
2. Conduct infrastructure protection activities for drinking water and water treatment agencies in the water sector. (Protect)
3. Provide technical personnel to evaluate damage to water control facilities. (Respond)
4. Provide engineering support to assist in evaluating damage to water control systems, such as dams, levees, and water delivery facilities and structures. (Respond)
5. Provide personnel to assist in damage assessment, structural inspections, debris clearance monitoring, and restoration of facilities. (Respond)
6. Provide technical assistance in contract management, contracting, procurement, construction inspection, and environmental and archeological assessments. (Respond)
7. As necessary, assist local jurisdictions with the assessment, repair, and restoration of damaged inter-country drains. (Recover)
8. Provide engineering, contracting/procurement, personnel, and equipment to assist in emergency removal of debris, demolition, temporary protection for ads and bridges, temporary protection of essential public facilities, water supply, and sanitation. (Recover)
9. Provide expertise and Conduct/Support specialized salvage/wreck removal operations as part of a coordinated response and restoration strategy. (Recover)
10. Assist with the coordination of salvage and wreck removal operations. (Recover)
11. Supply engineering and environmental health personnel to assist in conjunction with the EPA in assessing the status of water, wastewater, and solid waste facilities. (Recover)
12. Mark and coordinate with the USACE, USCG, and MSP for removal of obstructions declared to be hazardous to navigation. (Recover)
13. Assist in vessel salvage and removal of vessel debris (coordinating and/or providing resources, assessments, expertise, technical assistance, monitoring, and other support). (Recover)
14. Oversee oil and hazardous substance pollution response operations associated with debris removal/salvage operations. (Recover)
15. For CBRNE blasts or explosions creating a threat agent in a contaminated debris field, provide technical assistance and consultation during the assessment and stabilization of damaged and potentially contaminated infrastructure and demolition strategies. (Recover)
16. Assist investigation and intelligence analysis for hazardous materials incidents involving contaminated water and wastewater systems, pursuant to existing EPA statutory authorities. (Recover)
17. Assist in determining the sustainability for human consumption of water from local sources and identifying hazardous materials having the potential to affect drinking water supplies. (Recover)
18. Monitor and report on damaged food and/or agricultural infrastructure. (All)
19. Provide guidance on health problems associated with hazardous materials and consumption of water from local sources. (All)
20. Provide situational awareness regarding water and wastewater needs at healthcare critical infrastructure sector facilities. (All)

Department of Education (MDE)

1. Assess damage to, and impact on, public schools. (Respond)
2. Coordinate public school facility and operations restoration. (Recover)

Department of Health and Human Services (MDHHS) – Human Services

1. Provide situational awareness regarding water and wastewater needs as healthcare critical infrastructure facilities. (Respond)
2. Identify locations of/Provide safety guidance for areas affected by hazardous materials in conjunction with EGLE and LEO/MIOSHA. (Respond)
3. Provide guidance on health problems associated with hazardous materials and consumption of water from local sources. (All)

Department of Health and Human Services (MDHHS) – Health

1. Monitor and report on damaged and/or negative impacts to private health and medical care facilities. (Respond)
2. Lead agency to request and deploy the Strategic National Stockpile (SNS). (Respond)
3. Coordinate participation on damage assessment teams. (Respond)
4. Identify locations of/Provide safety guidance for areas affected by hazardous materials. (Respond)
5. Supply engineering and environmental health personnel to assist in conjunction with the EPA in assessing the status of water, wastewater, and solid waste facilities. (Recover)

6. Provide guidance on health problems associated with hazardous materials and consumption of water from local sources. (Recover)
7. Provide situational awareness regarding water and wastewater needs as healthcare critical infrastructure sector facilities. (Recover)
8. Assist investigation and intelligence analysis for hazardous materials incidents involving contaminated water and wastewater systems, pursuant to existing EPA statutory authorities. (Recover)
9. Assist in determining the sustainability for human consumption of water from local sources and identifying hazardous materials having the potential to affect drinking water supplies. (Recover)
10. Assist in determining the suitability for human consumption of water from local sources and in identifying hazardous materials having the potential to affect drinking water supplies. (All)

LEO -Michigan Occupational Safety & Health Administration (MIOSHA)

1. MIOSHA will provide support for the four phases (planning, mitigation, response, and recovery) of emergency management. Planning and mitigation will be supported through coordination and outreach. Where needed and as applicable and appropriate, MIOSHA will support emergency response and recovery operations as outlined below:
   a. Conduct hazard analyses.
   b. Recommend hazard controls and safe work practices.
   c. Provide expertise in safety and health risk assessment.
   d. Offer technical assistance and consultation.
   e. Provide guidance on selection and use of PPE, including respirator fit testing.
   f. Conduct on-site safety surveys and conduct atmospheric monitoring where it can be accomplished without risk to MIOSHA personnel.
   g. Answer questions related to MIOSHA regulations.
   h. Assist in the development of site health and safety plans.
   i. Collect and assemble safety and health data related to the incident.
   j. Provide pertinent information and literature on applicable safety and health guidelines. Note: OSHA and other OSHA State Plan staff will always distribute pertinent OSHA Guidelines during their emergency response.
2. MIOSHA's primary role in the Incident Command System (ICS) will be to assist the "Safety Officer". MIOSHA should not assume responsibility of the site Safety Officer. Resources may also be assigned to the Planning Section and Operations Section to assure that information needed for hazard analysis and risk assessment is communicated to the site Safety Officer.
3. Activation of the MIOSHA team will occur in response to a declaration of emergency by the Governor and communicated through the Emergency Management Division of the Michigan State Police Department, or as directed by the Director or designee of LEO. On a case-by-case basis, the Director or designee of LEO, such as the Emergency Management Coordinator or the MIOSHA Director, can also activate the MIOSHA team in response to requests from local, state, or federal governmental agencies. However, the incident should be large-scale, incident command system based, and multi-jurisdictional. The ICS structure and principles will be applied when the MIOSHA team is responding to any incident.

Department of Licensing and Regulatory Affairs (LARA)

1. Provide Construction Code Inspection services. (Prevent)
2. Maintain the teams, tools, and other resources to support ESF 3. (Protect)
3. Provide engineering personnel and support to assist in damage assessment, structural inspections, debris clearing (BFS), and restoration of state's transportation infrastructure (MDOT). (Recover)
4. Bureau of Fire Services (BFS) provides engineering and contracting/procurement personnel and equipment to assist in emergency removal of debris, demolition, temporary protection for ads and bridges, temporary protection of essential public facilities, water supply, and sanitation. (Recover)
5. Provide technical assistance in contract management, contracting, procurement, construction inspection, and environmental and archeological assessments. (All)

LA*RA - Michigan Public Service Commission (MPSC)*

1. Promotes and requires electrical infrastructure reliability enhancement measures to minimize storm-related electrical outages. (Prevent)
2. Monitor and Report on the assessment, repair, and restoration of damaged energy and telecommunications infrastructure. (Protect)
3. As appropriate, work with the MSP/EMHSD to communicate restoration priorities to electrical service providers to facilitate statewide incident recovery. (Respond)

NOTE: Telecommunication providers are not required to provide information to MPSC, and MPSC does not have the authority to order providers to share information. However, MPSC will contact impacted providers and request information regarding the situation and continue to monitor the recovery operations and follow-up with providers.

Department of Military and Veteran Affairs (DMVA)

1. Coordinate and provide military support to civil authorities – specific public works and engineering functions may include disaster debris management, decontamination support, and public facility damage assessment, restoration, and engineering. (Respond)
2. Coordinate the assessment, repair, and restoration of damaged state military facilities. (Recover)
3. Engineering Support Tasks. (Recover)
4. Provide engineering personnel and support, including design estimation and construction supervision for repair, reconstruction, and restoration of eligible facilities. (Recover)

Department of Natural Resources (MDNR)

1. Promote urban forestry measures to minimize storm-related tree damage and damage assessment. (Mitigate)
2. Provide engineering and contracting/procurement personnel and equipment to assist with debris management, demolition, and temporary protection. (Respond)
3. Provide staging areas for woody or green debris. (Respond)
4. Provide personnel to assist in damage assessment, structural inspections, debris clearance monitoring, and restoration of MDNR facilities. (Respond)
5. Assist in vessel salvage and removal of vessel debris (coordinating and/or providing resources, assessments, expertise, technical assistance, monitoring, and other support). (Respond)
6. Support, as needed, oil and hazardous substance pollution response on state lands, and/or impacting natural wildlife and/or resources. (Respond)
7. Provide engineering support to assist in evaluating damage to water control systems, such as dams, levees, and water delivery facilities and structures owned or managed by the department; EGLE engineering guidelines and EGLE dam safety unit monitor dam safety. (Respond)
8. Coordinate the assessment, repair, and restoration of damaged state lands and state owned recreational thorough ways (trails, forest roads, etc.). (Recover)
9. Assist with beach and shoreline clean up following water wreckage/salvage operations. (Recover)
10. Supply data or sensitive habitats (especially fish and birds). (All)
11. Mark and coordinate with the USACE, USCG, and MSP for removal of obstructions declared to be hazardous to navigation. (All)
12. Provide technical assistance in contract management, contracting, procurement, construction inspection, and environmental and archeological assessments. (All)
13. Identify locations of, and provide safety guidance for, areas affected by hazardous materials on state lands. (All)

Department of State (MDOS)

1. Provide liaison to USACE/MSP in the event of incidents having potential international implications. (Respond)
2. Coordinate international offers of public works and engineering assistance and support. (Respond)

Michigan State Police (MSP)

1. Provide expertise and Conduct/Support specialized salvage/wreck removal operations as part of a coordinated response and restoration strategy. (Respond)
2. Provide personnel to assist in damage assessment, structural inspections, debris clearance monitoring, and restoration of facilities. (Respond)
3. Work with MDHHS to provide all necessary law enforcement support in the deployment of the Strategic National Stockpile. (Response)
4. Provide contracting/procurement, personnel, and equipment to assist in emergency removal of debris, demolition, temporary protection for ads and bridges, temporary protection of essential public facilities, water supply, and sanitation. (Recover)
5. Coordinate salvage and wreck removal operations with DTMB. (Recover)
6. Assist in vessel salvage and removal of vessel debris (coordinating and/or providing resources, assessments, expertise, technical assistance, monitoring, and other support). (Recover)
7. Mark and coordinate with the USACE and USCG for removal of obstructions declared to be hazardous to navigation. (All)

MSP - Emergency Management Homeland Security Division (EMHSD)

1. Support ESF 3 infrastructure protection and mitigation (Protect)
2. Coordinate FEMA/State Joint Preliminary Damage Assessment. (Respond)

3. Provide situational awareness and prioritized recommendations for the stabilization and reestablishment of associated critical infrastructure sectors supported by this ESF. (Respond)
4. Provide personnel to assist in damage assessment, structural inspections, debris clearance monitoring, and restoration of facilities. (Respond)
5. For CBRNE blasts or explosions creating a threat agent in a contaminated debris field; MSP/EMHSD's REP program coordinates provision of technical assistance and consultation during the assessment and stabilization of damaged and potentially contaminated infrastructure and demolition strategies. (Respond)
    a. Assist radiological-contaminated debris management activities by coordinating resources, assessments, data, expertise, technical assistance, monitoring, and other appropriate support. (Respond)
6. Coordinate and administer the federal Public Assistance Grant Program (PAGP) to provide funding to repair, restore, or replace damaged public facilities. (Recover)
7. Coordinate disaster debris clearance and management activities, as required. (Recover)
8. Provide worker safety advice, assistance, and policy support for debris removal, building demolition, and other ESF 3 activities. (Recover)

MSP - Michigan Intelligence Operations Center (MIOC)

1. Support ESF 3 infrastructure protection and mitigation missions by providing infrastructure risk and vulnerability assessments in response to actionable intelligence and other information. (Respond)

Department of Technology, Management, and Budget (DTMB)

1. Assist in identifying critical water and wastewater needs, including personnel, electrical power, and treatment chemicals. (Respond)
2. Coordinate the assessment, repair, and restoration of damaged state facilities. (Recover)
3. Provide technical expertise and assistance for repair and restoration of transportation infrastructure and provide (vendor) advice on assistance of transportation of contaminated materials. (Recover)
4. Provide engineering personnel and support, including design estimation and construction supervision for repair, reconstruction, and restoration of eligible facilities. (Recover)
5. Exercise and manage regional standing emergency salvage contracts. (All)

Department of Transportation (MDOT)

1. Provide state highway/ trunkline control measures, evacuation routing, and access control, and perimeter points in coordination with the MSP and local jurisdictions. (Prevent)
2. Provide technical assistance to FEMA PAGP and HMGP. (Mitigate)
    a. Technical Assistance through MDOT's contracted services available.
3. Provide situational awareness and prioritized recommendations to incident command for the support the stabilization and reestablishment of critical infrastructure. (Respond)
4. Monitor and Report on damaged and/or negative impacts to private infrastructure, facilities, and systems as assessed by local partners. (Respond)
5. Assist with the procurement and administration of federal revenues, special funding, and grants, for transportation system development and maintenance with regards to disaster response and recovery and may also apply for daily operations. These activities may include the repair or reconstruction of major highway facilities, transit systems and railroads, and may include the FHWA funds. (Respond)
6. Assess damage to, and impact of, state highway/ trunkline failed transportation infrastructure and accidents (road, air, rail, mass transit, and marine). (Respond)
    a. Connect Air, Marine, and Rail owners with the federal contacts for damage assessment. Air, Marine, and Rail are primarily privately owned and federally regulated.
    b. Liaises with the National Transportation Safety Board (NTSB), which is responsible for investigating significant transportation accidents.
    c. Determines impacts on involved modes of transportation and/or transportation facilities, and assess property, environmental, and transportation infrastructure. Estimates response and recovery resource needs, duration of resource use, and associated costs.
7. Provide technical assistance, project management, engineering expertise, and construction management resources and support for transportation infrastructures during response activities. (Respond)
8. Provide infrastructure risk and vulnerability assessments in response to actionable intelligence and other information. (Respond)
9. Assist in emergency removal of debris, demolition, temporary protection for roads and bridges by providing access to the MDOT garage and/or through prequalified contracted individuals through DTMB's contracts established in ESF 7. (Respond)
10. Provide technical expertise and assistance for repair and restoration of transportation infrastructure and provide advice on assistance of transportation of contaminated materials. (Recover)

11. Assist in identifying engineering flaws which may determine the probable cause of accidents or damage. (Recover)
12. Administer special funding that can be used for repair or reconstruction of major highway facilities as well as grant programs for transit systems and railroads that could be used for repair and rehabilitation of damaged infrastructure. (Recover)
13. Maintain, repairs, and restores the state highway/ trunkline system and state-owned rail lines. (All)
14. Maintain the teams, tools, and other resources to support ESF 3. (All)
15. Provide advice on assistance of transportation of hazardous materials. (All)

Tasks: Federal Government Support Agencies

United States Army Corp of Engineers (USACE)

1. Provide technical assistance, project management, engineering expertise, and construction management resources and support during response activities. (Respond)
2. Provide expertise and Conduct/Support specialized salvage/wreck removal operations as part of a coordinated response and restoration strategy. (Respond)
3. Mark and coordinate with the USCG and MSP for removal of obstructions declared to be hazardous to navigation. (Respond)
4. Assist in vessel salvage and removal of vessel debris (coordinating and/or providing resources, assessments, expertise, technical assistance, monitoring, and other support). (Respond)
5. Maintain teams, tools, and other resources to support ESF 3. (All)

United States Coast Guard (USCG)

1. Provide expertise and Conduct/Support specialized salvage/wreck removal operations as part of a coordinated response and restoration strategy. (Respond)
2. Coordinate salvage and wreck removal operations. (Respond)
3. Assist in vessel salvage and removal of vessel debris (coordinating and/or providing resources, assessments, expertise, technical assistance, monitoring, and other support). (Recover)
4. Oversee oil and hazardous substance pollution response operations associated with debris removal/salvage operations. (Recover)
5. Mark and coordinate with the USACE and MSP for removal of obstructions declared to be hazardous to navigation. (All)
6. Access and coordinate hydrographic survey assets and capabilities. (All)

National Weather Service (NWS)

1. Provide hydrographic survey assets and expertise as part of a coordinated strategy of response/restoration of critical waterways, channels, and ports. (Respond)
2. Provide scientific support in assessing impact to coastal zone using population data, storm track, known areas of coastal damage, and general information on currents and winds to predict areas of high debris density and abundance. (Respond)
3. Access and coordinate hydrographic survey assets and capabilities. (All)

Tasks: Nonprofit Organization Partners

Michigan Economic Development Corporation (MEDC)

1. Assist in identifying structures, sites, facilities, items, and artifacts of importance in disaster areas. (Respond)
2. Coordinate the issuance of grants for the restoration of disaster damaged historic properties and sites. (Recover)
3. Provide technical assistance in contract management, contracting, procurement, construction inspection, and archeological assessments (All)

Michigan Voluntary Organizations Active in Disaster (MI VOAD)

1. May provide volunteers of trained National Service Participants (AmeriCorps, Lean and Serve America, Retired and Senior Volunteers) in coordination with the MCSC to carry out canvassing, needs assessment, information distribution, debris clearance, temporary roof repair, elimination of specified health/safety hazards, and other response activities, including support commodity distribution. (Respond)

Additional Sources:

United States Department of Homeland Security; Cyber Infrastructure Security Agency. *A Guide to Critical Infrastructure Security and Resilience*. November 2019. *CISA.gov*, https://www.cisa.gov/publication/guide-critical-infrastructure-security-and-resilience. Accessed 2 March 2020.

ESF 4: FIRE FIGHTING

Definition/Purpose: The purpose of ESF 4 is to provide support for the detection and suppression of wildland, rural, and urban fires resulting from, or occurring coincidentally with, an all-hazard incident requiring a coordinated response for assistance.

Scope: Activities in this function support local, tribal, and state area agencies involved in wildland, rural, and urban firefighting. Activities include the coordination of firefighting activities, and the provision of personnel, equipment, and supplies.

Core Capabilities: Fire Management and Suppression, Situational Assessment, Infrastructure Systems, Operational Communications

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 4 is most closely associated with the Safety and Security Lifeline.

Other ESF Overlap:
ESF 10: Oil and Hazardous Materials – Sometimes incidents which involve oil and hazardous materials, and ESF 10, include firefighting, ESF 4, capabilities due to volatile substances or reactions.
ESF 13: Public Safety and Security – Firefighting in ESF 4 directly informs the public safety and security in ESF 13; when fires are large, they almost always impact life safety.

Other Plans and Annexes:
Disaster-specific Annex: Large Fires – ESF 4 is intrinsically linked with large fires due to the nature of the ESF and the incident type. Large fires are those which go beyond the capabilities of local responders and often require multi-jurisdictional coordination.
Disaster-specific Annex: Hazardous Materials Incident – ESF 4 is often needed in responding to Hazardous Materials incidents due to the high probability of fire resulting from oil and hazardous materials.
Disaster-specific Annex: CBRNE Terrorism – ESF 4 is likely to be needed in incidents which include explosive terrorist attacks, although terrorist incidents with chemical, biological, radiological, or nuclear weapons may also create a need for firefighting capabilities.
Disaster-specific Annex: Nuclear Attack – ESF 4 will be needed in a nuclear (military) attack because nuclear attacks of a military nature create fires and threaten public health and safety.

Other Areas of Interest:
Additional Context: In any large fire incident, local fire departments and resources would be deployed to the scene, followed by neighboring or voluntary resources, then resources requested through Mutual Aid Box Alarm System (MABAS). The State of Michigan can deploy some resources to aid a local jurisdiction in responding to a fire incident, however these resources are to supplement local response and are limited in availability and capability.

Fires which occur on federal lands are the responsibility of federal agencies, which may request the assistance of state, local, tribal, private, and non-profit partners for assistance. Fires which occur on private or commercial lands are under the jurisdiction of the local fire departments which have legal mandate for initial response. The MDNR may request assistance from local fire departments and volunteers in responding to a fire on MDNR Forest Service lands.

The firefighting resources in the State of Michigan are largely volunteer based and in an incident the strength and speed of response may depend upon outside factors affecting the volunteer firefighters; this can lead to a delay in response or a limited ability to respond depending the on time, location, and scope of disaster. Local fire departments are typically responsible for structural firefighting. Local, state, and tribal governments, including state forestry organizations and local fire departments, may assist other local, state, and tribal governments in firefighting operations through existing agreements.

Interagency Resource Ordering Capability (IROC) – Replaced the Ross System as the current resource ordering platform which also includes the qualifications of deployable individuals. Qualifications follow the National Wildlife Coordination Group (NWCG) standards, which are universal across the United States and specific to wildland fires. Additional qualifications through FEMA NIMS/ICS may not be included in this system.

> "IROC is a dynamic, modern, flexible, and scalable application that aligns with interagency business needs for resource ordering for all hazard incidents. IROC is web-based and supports both PCs and mobile devices…[and] provides the Dispatch Community with a fast and stable system that works well even during peak activity. It also supports a simple reporting user interface." (See ESF 4 Sources)

Tasks: Lead Agencies

Michigan Department of Natural Resources (MDNR)

The MDNR may assist with fire suppression on private or state land but does not take primary lead. The MDNR may take initial tactics on Bureau of Indian Affairs (BIA) for travel trust lands for fire suppression due to a contract with this agency. The MDNR's Forest Services department may combat fires on Forest Service's grounds but will report these for additional assistance. State forestry organizations are responsible for wildland firefighting on non-federal land.

1. Identify local structure fire resources not currently available through the existing national firefighting mobilization system and assist with incorporating these into the system. (Protect)
2. Coordinate wildfire mitigation, prevention, and suppression activities. (Protect)
3. Coordinate state firefighting activities by mobilizing firefighting resources, including support personnel, in support of local, state, and tribal wildland, rural, and urban firefighting agencies statewide. (Respond)
4. Assist and support the suppression of wildfires burning on National Forest System lands and joins in a unified command with local jurisdictions on incidents threatening National Forest System. (Respond)
5. Take primary lead in fire suppression on State Forest System and private forests lands with MDNR jurisdictions. (Respond)
6. Provide and coordinate firefighting assistance to other state land management, forestry, and local, tribal, and territorial area fire organizations as required under the terms of existing agreements. (Respond)
7. Arrange for and provide direct liaison with local, state, and tribal EOCs and fire chiefs in the designated area, as appropriate to coordinate request for firefighting wildfire fires. (Respond)
8. Assumes full responsibility for fighting wildfires burning on lands within MDNR jurisdiction and join unified command with local jurisdiction on incidents threatening lands within MDNR jurisdiction. (Respond)
9. Assist USDA/Forest service in managing and coordinating firefighting operations. (Respond)
10. Provide firefighting assistance to other state land management, state forestry, and local, state, and tribal fire organizations as requested under the terms of existing agreements and the NRF. (Respond)
11. Coordinate MDNR Type III IMT, which may handle fire and hazardous materials. (Respond)
12. Provide contact with appropriate fire service organizations/associations at the state and national level to ensure actions by these organizations relative to disaster planning, preparedness, or response are coordinated with the ESF 4 agencies. (All)

LARA - Bureau of Fire Services (BFS)

The BFS does not have direct command over local fire departments and agencies, which are independently organized and operated. Local fire departments may consist of volunteers, full time staff, or a combination. The BFS keeps statistics on the number of fire departments in Michigan as well as the average percentage of volunteers composing fire departments.

1. Conduct fire safety and prevention inspections. (Prevent)
2. Identify local structure fire resources not currently available through the existing national firefighting mobilization system and assist with incorporating these into the system; with a special focus on fire departments not involved in MABAS. (Protect)
3. Disseminates information and provide subject matter experts to improve infrastructure protection efforts in emergency services. (Protect)
4. Coordinate statewide fire mitigation and preparedness efforts. (Mitigate)
5. Coordinate state firefighting activities by mobilizing firefighting resources in support of local, state, and tribal wildland, rural, and urban firefighting agencies nationwide. (Respond)
6. Provide support personnel at the state, regional, and incident levels. (Respond)
7. Provide and coordinate firefighting assistance to other state land management, private, forestry, and local, tribal, and territorial area fire organizations as required under the terms of existing agreements. This includes assisting MDNR with suppression of wildfires burning on National Forest System lands. (Respond)
8. Arrange for and provide direct liaison with local, state, and tribal, EOCs and fire chiefs in the designated area, as appropriate to coordinate request for firefighting assistance in structural or industrial fire detection, protection, and suppression operations. (Respond)
9. Provide qualified ESF 4 personnel to serve at State level during a Stafford Act incident. (Recover)
10. Coordinate fire investigation services with the MSP. (Recover)
11. Assist with assessment of impacted emergency services sector critical infrastructure. (Recover)
12. Provide contact with appropriate fire service organizations/associations at the state and national level to ensure actions by these organizations relative to disaster planning, preparedness, or response are coordinated with the ESF 4 agencies. (All)

Tasks: State Government Support Agencies

Governor's Office

1. Notify or respond to foreign country potential fire threats as required by International Health Regulations. (Respond)

Michigan Department of Agriculture and Rural Development (MDARD)

1. Provide assistance in identifying an uncontaminated, operational, water source for firefighting. (Respond)
2. Provide assistance in identifying critical water systems requiring priority restoration for firefighting. (Recover)

Department of Attorney General (MDAG)

1. Coordinate with foreign governments on identification and movement to the United States of assets and resources for firefighting assistance. (Respond)
2. Coordinate with foreign states concerning offers of support, gifts, offerings, donations, and other aid. (Recover)

Department of Corrections (MDOC)

1. Provide contract support for temporary storage capability of human remains in a catastrophic fatality incident, such as refrigerated trucks, trailers, or rail cars. (Respond)

Department of Environment, Great Lakes, and Energy (EGLE)

1. Monitor and regulates potential scrap tire fire hazards. (Mitigate)
2. Provide technical assistance in the event of fires involving hazardous materials by identifying reactor agents. (Respond)
3. Assist in identifying critical water systems requiring priority restoration for firefighting. (Respond)
4. Provide technical assistance on issues concerning the impacts of firefighting chemicals. (All)

LEO -Michigan Occupational Safety & Health Administration (MIOSHA)

1. MIOSHA will provide support for the four phases (planning, mitigation, response, and recovery) of emergency management. Planning and mitigation will be supported through coordination and outreach. Where needed and as applicable and appropriate, MIOSHA will support emergency response and recovery operations as outlined below:
   a. Conduct hazard analyses.
   b. Recommend hazard controls and safe work practices.
   c. Provide expertise in safety and health risk assessment.
   d. Offer technical assistance and consultation.
   e. Provide guidance on selection and use of PPE, including respirator fit testing.
   f. Conduct on-site safety surveys and conduct atmospheric monitoring where it can be accomplished without risk to MIOSHA personnel.
   g. Answer questions related to MIOSHA regulations.
   h. Assist in the development of site health and safety plans.
   i. Collect and assemble safety and health data related to the incident.
   j. Provide pertinent information and literature on applicable safety and health guidelines. Note: OSHA and other OSHA State Plan staff will always distribute pertinent OSHA Guidelines during their emergency response.
2. MIOSHA's primary role in the Incident Command System (ICS) will be to assist the "Safety Officer". MIOSHA should not assume responsibility of the site Safety Officer. Resources may also be assigned to the Planning Section and Operations Section to assure that information needed for hazard analysis and risk assessment is communicated to the site Safety Officer.
3. Activation of the MIOSHA team will occur in response to a declaration of emergency by the Governor and communicated through the Emergency Management Division of the Michigan State Police Department, or as directed by the Director or designee of LEO. On a case-by-case basis, the Director or designee of LEO, such as the Emergency Management Coordinator or the MIOSHA Director, can also activate the MIOSHA team in response to requests from local, state, or federal governmental agencies. However, the incident should be large-scale, incident command system based, and multi-jurisdictional. The ICS structure and principles will be applied when the MIOSHA team is responding to any incident.

LARA - Michigan Public Service Commission (MPSC)

1. Provide situational awareness, cross-sector coordination, and prioritized recommendations regarding critical infrastructure and key resources. (Respond)

Department of Military and Veteran Affairs (DMVA)

1. Support firefighting operations on nonmilitary lands with personnel, equipment, and supplies, under the terms of current interagency agreements (including liaisons as required). (Respond)
2. Engineering support task assignments: ground firefighting. (Respond)
3. Public Safety Task Assignments: Active for wildfires and provide fire suppression assistance and support as required. (Respond)
4. Assume full responsibility for firefighting activities on MDMVA installations. (All)

Department of State (MDOS)

1. Coordinate with foreign governments on identification and movement to the United States of assets and resources for firefighting assistance. (Respond)
2. Coordinate with foreign states concerning offers of support, gifts, offerings, donations, and other aid. (Recover)
3. Provide contact with appropriate fire service organizations/associations at the state and national level to ensure actions by these organizations relative to disaster planning, preparedness, or response are coordinated with the ESF 4 agencies. (All)

Michigan State Police (MSP)

1. Work in conjunction with local and federal partners to direct authority for safeguarding ports through waterfront ground control. (Respond)
2. Provide secondary support and resources to locals for marine firefighting assistance, as available, commensurate with each unit's level of training and the adequacy of available equipment. (Respond)
3. Provide rescue resources and assistance to firefighting activities. (Respond)
4. Provide specialized resources to support emergency operations including fire investigator, and bomb squad teams. (Respond)
5. Coordinate law enforcement and fire investigation activities within the affected area. (Respond)
6. Provide logistics support through appropriate DC and EOC to mobilize resources for fire investigation. (All)

MSP - Emergency Management Homeland Security Division (EMHSD)

1. Closely monitor magnitude of the fire with MDNR on the scene of the wildfire. Determine if wildfire presents as a major disaster, as far as possible destruction, and advise the Governor to contact FEMA Regional Administrator by telephone within 24 hours of the onset of the fire to request a federal declaration under the Fire Management Assistance Grant (FMAG). (Respond)
2. Provide logistics support through appropriate District Coordinator and EOC to mobilize resources for firefighting. (Respond)
3. Arrange for, and provide direct liaison with, local, state, tribal, territorial, and insular area EOCs and fire chiefs in the designated area, as appropriate to coordinate request for firefighting assistance in structural or industrial fire detection, protection, and suppression operations. (Respond)
4. Participate in the State Fire response as requested. (Respond)
5. Request EMAC Fire Resources as needed. (Crosses with Logistical support). (Respond)
6. Assist with assessment of impacted emergency services sector critical infrastructure. (Respond)
7. Coordinate with foreign governments on identification and movement to the United States of assets and resources for firefighting assistance. (Recover)
8. Coordinate with foreign states concerning offers of support, gifts, offerings, donations, and other aid. (Recover)
9. Provide contact with appropriate fire service organizations/associations at the state and national level to ensure actions by these organizations relative to disaster planning, preparedness, or response are coordinated with the ESF 4 agencies. (All)

MSP - Michigan Intelligence Operations Center (MIOC)

1. Provide MDHHS with relevant information of any credible threat or other situation that could potentially threaten public health. This is supported through FBI headquarters. (Prevent)
2. Share missing person data with ESF 6, ESF 8, ESF 13, and the American Red Cross in support of identification of the deceased and seriously wounded. (Respond)

Department of Technology, Management, and Budget (DTMB)

1. Private sector resources are mobilized through standard procedures. (Respond)
2. Upon notification of an incident requiring a coordinated state response, the DTMB SEMC notifies entities within the agency which are required to provide immediate support to include senior management staff as appropriate. (Respond)

Tasks: Federal Government Support Agencies

United States Army Corp of Engineers (USACE)

1. Provide contracting services through ESF 3 to urban and rural firefighting forces to obtain heavy equipment and/or demolition service to suppress incident-related fires as needed. (Respond)

United States Coast Guard (USCG)

1. Provide marine firefighting assistance, as available, commensurate with each unit's level of training and the adequacy of available equipment. (Local public services would be the first responders to this.) (Respond)
2. Direct authority for safeguarding ports and may exercise federal control over vessels, ports, harbors, and waterfront facility operations and vessel movements as necessary, in conjunction with local public safety partners. (Respond)
3. Assume responsibility and direct authority for safeguarding ports and may exercise federal control over vessels, ports, harbors, and waterfront facility operations and vessel movements as necessary. (Respond)

National Weather Service (NWS)

1. Provide forecasts on the dispersion of smoke in support of planning and response activities. (Respond)
2. Provide near real-time transport, dispersion, and predictions of atmospheric releases of radioactive and hazardous materials that may be used by authorities in taking protective actions related to sheltering and evacuating affected populations. (Respond)
3. Assist with the Interagency Modeling and Atmospheric Assessment Center (IMAAC) to coordinate, produce, and disseminate dispersion modeling and hazard prediction products that represent the state position during an actual or potential incident to aid emergency responders in protecting the public and environment. (Respond)
4. Provide fire/weather forecasting as needed, under terms of existing interagency agreements. (All)

Federal Bureau of Investigations (FBI)

1. Act through the Federal Bureau of Investigation (FBI) to conduct evidence collection and analysis of all CBRN-related materials and controls potential crime scenes. (Respond)

Additional Sources:

"Interagency Resource Ordering Capability (IROC)" *FAM-IT Portal*. https://famit.nwcg.gov/applications/IROC. Accessed 11 Jan. 2022.

ESF 5: INFORMATION AND PLANNING

Definition/Purpose: The purpose of ESF 5 is to collect, analyze, process, and disseminate information about potential or actual incidents, and conduct deliberate and crisis action-planning activities to facilitate the overall activities in providing assistance to the whole community.

Scope: Activities in this ESF inform, and aid in, planning the response and recovery, and for all phases of the disaster cycle to ensure the protection of life, property, the environment, and recovery functions. Primary functional responsibilities in ESF 5 include:

- Coordinating the development of state, local, and tribal plans to manage and support incident activities in coordination with federal, state, local, and tribal partners, agencies, and departments, including crisis and incident action planning, risk analysis and capability requirements.
- Coordinating the development of overall incident situational awareness, including information collection, management, modeling, and analysis.
- Developing reports and informational analysis on operational status and impacts.
- Creating procedures and protocols for releasing warnings, incident notifications, public communications, and critical information through defined networks and EOCs.
- Aid in the effective communication with individuals with disabilities, access and functional needs, and vulnerable populations.

Core Capabilities: Planning, Situational Assessment, Public Information and Warning

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 5 supports multiple Lifelines in one way or another and can be seen in the collection of the information to inform lifelines.

Other ESF overlap:
ESF 3: Public Works and Engineering – Damage assessment is a function of ESF 3, however in ESF 5: Information and Planning, this information is organized and interpreted, and may be used to determine required assistance.
ESF 13: Safety and Security – Continual monitoring and assessing of information, whether in disaster response or not, is critical to ensure ESF 13 is able to anticipate and respond accordingly to potential threats and hazards which may identified through ESF 5: Information and Planning.
ESF 15: External Affairs – Initial communication with disaster survivors following an incident requires tight cooperation between ESF 15, ESF 2, and ESF 5 to ensure that systems required to communicate messages are available for use and that messages are formatted for the audiences receiving them, which may include populations with disabilities, access and functional needs, or vulnerabilities.

Other Plans and Annexes:
Damage Assessment Handbook – The collection of damage assessment information following a disaster is critical to the disaster response and recovery operations. This publication specifically identifies the methods, schedules, and operations required for damage assessment information collection, which operates in partnership between ESF 3, and ESF 5.

Other Areas of Interest:
Due to the nature of ESF 5, this ESF will be involved in all incidents; information gathering, planning, and organizing is an intrinsic part of the NIMS and SEOC operations. In addition to managing and handling information in incident response, ESF 5 continues activities in non-disaster operations through continued planning and financial management activities in coordination with external partners.

This ESF covers a wide variety of specialty interests, including but not limited to, communications with individuals with access and functional needs, disabilities, or vulnerable populations, and financial and administrative limitations and areas of concern.

Tasks: All Agencies

1. Develop operational plans and procedures to inform internal coordination and execution of objectives and tasks set forth by the Governor, in the SEOC, and MEMP. (Protect)
2. Assist in identifying structures, sites, facilities, items, artifacts, and geographic features of importance in disaster areas. (Protect)
3. Provide accurate and timely information related to an actual or potential incident. (Respond)

4. Develop and executes plans related to an actual or potential incident; including but not limited to providing appropriate personnel for assessment functions, providing assessment information on damaged state facilities and impacted state functions, providing photographs of emergency or disaster related damage, monitoring and reporting damage and impacts to critical private sector facilities, infrastructures, and systems, etc. (All)
5. Provide information collection, analysis, and dissemination support. (All)

Tasks: Lead Agency

MSP- Emergency Management and Homeland Security Division (EMHSD)

The EMHSD is a unique division which is dedicated to preventing, protecting against, mitigating, responding to, and recovering from all disasters or incidents in the State of Michigan. Responsibilities of EMHSD staff in non-disaster situations often overlap with ESF tasks and missions, and EMHSD staff also act in SEOC-specific roles in disaster situations.

1. Coordinate with the development of various state and local plans and provide planning assistance to LEPCs to facilitate development and maintenance of required plans. (Protect)
2. Coordinate and administer the federal Hazard Mitigation Assistance (HMA) program to provide funding for cost-effective mitigation measures to reduce the long-term risk to public facilities from disaster damage. (Mitigate)
3. Share information and knowledge to ensure collective situational awareness and a common operating picture is understood for the whole community through effective planning and information management. (Respond)
4. Develop reports and other products for incident situational awareness. (Respond)
5. Develop and create documents which project forward incident activities and actions. (Respond)
6. Coordinate, produce, and disseminate modeling and hazard prediction products that represent the state position during an actual, or potential, incident to aid emergency responders in protecting the public and environment in coordination with state agencies. (Respond)
7. Review and evaluate situational and damage assessment information for Situation Reports (SitReps), Senior Leadership Briefs, and other situational awareness documents. (Respond)
8. Compile the Situation Report (SitRep), Senior Leadership Brief, and other planning documents – MI CIMS; generally informed by the DC or local emergency manager. (Respond)
9. Coordinate with ESF 15 and ESF 2 for initial public information distribution. Provide situational awareness, public alerting/warning systems, and populations with disabilities, vulnerabilities, or access and functional needs. (Respond)
10. Maintain damage assessment totals through MI CIMS and ARC GIS Online utilizing GIS capabilities, local input into the damage assessment board, and information gathered from other sources. (Respond)
11. Organize the public information function in the SEOC in coordination with ESF 15. (Respond)
12. Maintain documentation regarding incident response and recovery activities in the SEOC. (Respond)
13. Administer federal and state disaster relief funds. (Recover)
    a. Coordinate and administer the federal Public Assistance Grant Program (PAGP) to provide funding to repair, restore, to replace damaged public facilities. (Recover)
    b. Coordinate and administer the State Disaster Assistance program detailed in PA 390 of 1976, as amended. (Recover)
    c. Coordinate and administer the federal Individual Assistance Grant Program (IAGP) to provide assistance to individuals and households for losses sustained under a federally declared disaster. (Recover)
14. Prepare materials for Governor's declaration of disaster or emergency. (Respond, Recover)
    a. MSP/EMHSD prepares a recommendation to the Governor's office that evaluates if a declaration is warranted and necessary upon requests for a state declaration from local jurisdiction, or when incident circumstances require a state declaration.
    b. MSP/EMHSD may prepare a draft emergency or disaster declaration for the Governor (Executive Order or Proclamation).
15. Prepare Governor's request for Presidential declaration of Major Disaster or Emergency. (Respond, Recover)
    a. EMHSD seeks input for requests for Presidential declarations from SEOC CGS, the State PA Officer, State IA Officer, appropriate state agency and NGO partners, District Coordinators, and local jurisdictions.
    b. EMHSD drafts request letters and forms for review, signature, and submission to FEMA through the Governor's office.
16. Coordinate and conduct FEMA/State Joint Preliminary Damage Assessments (PDA) for impacted areas to determine potential for eligibility under federal disaster assistance programs. (Recover)
17. Review and identify the need for supplemental appropriations. Work with State Budget Office (SBO) to address the need with the state legislature. (Recover)
18. Work with all partners to develop coordinated interagency crisis action plans for executing operations in all Mission Areas. (All)
19. Coordinate and manage development of interagency remote-sensing and geospatial information used in support of a potential or actual Federal incident response. (All)

20. Process geospatial information and develop maps and other informational displays. (All)

Tasks: State Government Support Agencies

Governor's Office

1. Suspend regulatory statues, orders, or rules. (Respond)
2. Direct other actions deemed appropriate to protect life and property. (Respond)
3. Declare a "state of emergency", "state of disaster", or "heightened state of alert", when applicable. (Respond, Recover)
4. Request Major Disaster or Emergency declarations under the Stafford Act from the President of the United States, when applicable. (Respond, Recover)
5. Authorize and control the release of public information. (All)

Michigan Department of Agriculture and Rural Development (MDARD)

1. Coordinate and conduct monitoring, sampling, inspection, and regulatory services to protect human and animal food supplies and the agricultural environment. (Protect)
2. Monitor damaged food and/or agricultural infrastructure. (Recover)
3. Coordinate with the United States Department of Agriculture (USDA) and other appropriate departments/agencies in the assessment of damage and impact to agricultural resource and enterprises. (Recover)
4. As needed, assist local jurisdictions with the assessment, repair, and restoration of damaged inter-county drains. (Recover)

Department of Attorney General (MDAG)

1. Monitor and investigate incidents of price gouging associated with shortages. (Respond)
2. Responsible for the release, dissemination, use, and publication of information on any matter related to state prosecutions and ongoing state investigations, including terrorism, espionage, and other criminal matters. (All)
3. Provide legal assistance to state agencies. (All)

Department of Civil Rights (MDCR)

1. Intervene in tension-creating situations involving potential civil rights violations. (Prevent)
2. Provide subject matter expertise and participate in planning and response activities as they relate to survivors with disabilities or other access and functional needs. (All)

Department of Corrections (MDOC)

1. Coordinate the assessment, repair, and restoration of damaged state correctional facilities. (Recover)

Department of Environment, Great Lakes, and Energy (EGLE)

1. Coordinate, produce, and disseminate modeling and hazard prediction products that represent the state position during an actual or potential incident to aid emergency responders in protecting the public and environment in coordination with EMHSD GIS. (Respond)
2. Monitor, and report on, oil and gas well or pipeline activity through the Oil, Gas, and Minerals Division (OGMD). (All)
3. Provide monitoring, sampling, and analysis services. (All)
4. Administer the Pollution Emergency Alerting System (PEAS). (All)
5. Monitor and regulate subsidence threat. (All)
6. Coordinate the assessment, repair, and restoration of damaged dams, water supply systems, and wastewater collection and treatment facilities. (All)

Department of Health and Human Services (MDHHS) – Health

1. Coordinate victim identification and advocacy services. (Respond)
2. Coordinate with the National Disaster Medical System (NDMS) – Disaster Medical Assistance Teams. (Respond)
3. Coordinate with the National Disaster Medical System (NDMS) – Disaster Mortuary Response Teams; Presidential Major Disaster or Emergency Declaration. (Respond)
4. Coordinate with the National Disaster Medical System (NDMS) – Disaster Mortuary Response Teams; Memorandum of understanding with the Federal Department/Agency. (Respond)
5. Support disaster fatality management – victim ante-mortem data collection team. (Respond)
6. Conduct epidemiological surveillance and investigation. (Respond)
    a. Michigan Disease Surveillance System (MDSS).
    b. Emergency Department Syndromic Surveillance System (EDSSS).
    c. Early Warning Infectious Disease Surveillance (EWIDS).

7. Coordinate medical surge for mass casualty care – Regional Healthcare Coalitions; EMSystems /EMResource. (Respond)
8. Coordinate medical surge for mass casualty care – Regional Healthcare Coalitions; Patient Tracking. (Respond)
9. Support the creation and operation of family assistance centers. (Respond)
10. Coordinate with assessment, repair, and restoration of damaged state mental health facilities. (Recover)
11. Coordinate with assessment, repair, and restoration of damaged state training and rehabilitation (juvenile justice) facilities, and the MCTI. (Recover)
12. Monitor and report on private health and medical care facilities. (All)
13. Provide liaison to federal emergency health and medical programs and services (including behavioral health). (All)
14. Conduct public health laboratory testing. (All)
    a. BioWatch.
15. Coordinate with food and environmental testing services. (All)

MDHHS - Aging and Adult Services Agency (AASA)

1. Provide assessment information on damaged home- and community-based services for senior citizens. (Recover)
2. Assist in identifying available housing resources. (Recover)
3. Conduct a needs assessment of and coordinate and monitor the provision of assistance to elderly disaster survivors. (Recover)
    a. Preliminary damage assessment.
    b. Individual assistance under a presidential major disaster declaration.
4. Maintain liaison with the local government and volunteer human service agencies. (All)

Department of Insurance and Financial Services (DIFS)

1. Provide insurance information to disaster survivors. (Recover)

Department of Licensing and Regulatory Affairs (LARA)

1. Ensure health care facilities have emergency procedures. (Protect)
2. Implement appropriate economic stabilization measures. (Recover)
3. Private long-term facility operational status. (All)
4. Provide interpreter services, as required. (All)

LARA -Bureau of Fire Services (BFS)

1. Ensure health care facilities have emergency procedures. (Protect)

LARA - Michigan Public Service Commission (MPSC)

1. Monitor and report on damaged private energy infrastructure. (Respond)

Department of Military and Veteran Affairs (DMVA)

1. Command and Control Support Task Assignments. (Respond)
2. Information Collection, Analysis, and Dissemination Support Task Assignments. (Respond)
3. Coordinate/provide military support to civil authorities. (Respond)
4. Provide emergency grants for veterans. (Recover)

Department of Natural Resources (MDNR)

1. Provide space at the MI History Center for vital records storage and manuscript depository. (Protect)

Department of State (MDOS)

1. Expedite the filing of emergency rules. (Respond)

Michigan State Police (MSP)

1. Assist in victim identification. (Respond)
2. Coordinate the collection, review, and assessment of various medias for incident-related video and photography. (Respond)

MSP- Michigan Intelligence Operations Center (MIOC)

1. Work with federal partners; FBI, DHS, etc. and intelligence community sources for threat/vulnerability related bulletins directly related to Michigan. (Prevent)
2. Produce suspicious activity reports, which assist in informing ESF 13 of potential dangers. (Prevent)

3. Work with suspicious activity bulletins to provide outside information including for law enforcement and SEMCs. (Prevent)
4. Maintain public and private security consortiums throughout the state to share and collect intelligence. (Prevent)
5. Produce statewide threat assessment for primarily terrorism threats that could affect the state; also natural incidents. (Prevent)
6. Share/report information with national fusion center network, especially the central region. (Prevent)
    a. Maintain and update the terrorism watchlist through LEIN via the fusion center; including the TSC – terrorist screening center list.
7. Produce threat assessments for special events/reoccurring incidents/events. (Protect)
8. Support special events through: (Protect)
    a. IOC/EOC for suspicious activity; to work-up or feed information up the chain to federal partners, and/or down the way from federal to local.
    b. Physical security assessments and planning assistance.
9. Perform Critical Infrastructure and Key Resources (CIKR) hazard vulnerability assessment in conjunction with privately owned critical infrastructure partners, including hazard vulnerability assessments for special events and day to day operations. (Protect)
10. Produce social media research – utilized with general search parameters with key words and incidents including keyword alerts to assist the JIS and other partners. (All)
11. Maintain and act as main point of contact for HSIN and HSIN exchange, including: (All)
    a. Incident management/real time communication platform, as needed.
    b. Connect all command centers and Operations Desk, if needed, for an event.
    c. Intelligence sharing component; primary communication with other fusion centers designated by DHS.

Department of Technology, Management, and Budget (DTMB)
1. Provide space for vital records storage. (Protect)
2. Update appropriate information to the SOM website. (Recover)

Michigan Civil Service Commission (MiCSC)
1. Modify Civil Service Rules to allow temporary hiring, re-direction, or alteration of working hours and conditions. (Respond)

Department of Transportation (MDOT)
1. Monitor, and report on, damaged and/or negatively impacted transportation infrastructure, facilities, and systems. (Respond)
2. Provide air services for emergency transportation and documentation. (Respond)
3. Monitor and report damage to the transportation system and infrastructure as a result of the incident. (Respond)
4. Provide technical assistance to FEMA Public Assistance Grant Program (PAGP) and Hazard Mitigation Grant Program (HMGP). (Recover)
5. Provide aerial documentation following a disaster. (All)

Department of Treasury (MDT)
1. Issue emergency payments. (Recover)

Tasks: Federal Government Support Agencies
National Weather Service (NWS)
1. Coordinate, produce, and disseminate modeling and hazard prediction products that represent the state position during an actual or potential incident to aid emergency responders in protecting the public and environment. (All)

Tasks: Nonprofit Organization Partners
American Red Cross (ARC)
1. Shares Red Cross summary and detailed damage assessment data to contribute to the common operating picture. (Response)

Michigan Economic Development Corporation (MEDC)
1. Assist damage assessment teams in identifying historically or archaeologically significant structures, sites, facilities, items, artifacts, and geographic features within the disaster area. (Respond)
2. Coordinate the issuance of grants for the restoration of disaster damaged historic properties and sites. (Recover)

ESF 6: MASS CARE, EMERGENCY ASSISTANCE, TEMPORARY HOUSING, AND HUMAN SERVICES

Definition/Purpose: The purpose of ESF 6 is to coordinate and provide life-sustaining resources, essential services, and statutory programs when the needs of disaster survivors exceed local or tribal government capabilities.

Scope: Activities in this function may require varying levels of support depending upon the magnitude and type of incident, location of incident, or presidential declaration of major disaster or emergency. ESF 6 is divided into four primary functions; the scope of ESF 6 can be addressed by those four functions listed below.

Mass Care	Congregate sheltering; feeding; distribution of emergency supplies; reunification (See Evacuation and Mass Sheltering Support Plan).
Emergency Assistance	Coordinate volunteer organizations, coordinate unsolicited donations, coordinate and manage unaffiliated volunteers (See *Michigan Disaster Logistics Management Plan*); non-congregate and transitional sheltering; supporting individuals with disabilities and other access and functional needs; support children in disasters; mass evacuation support (See *Evacuation and Mass Shelter Support Plan*); support household pet and service animal rescue, transportation, care, shelter, and essential needs (See *Animal Care Support Plan*).
Temporary Housing	Temporary housing options including rental, repair, loan assistance; replacement; factory-built housing; semi-permanent construction; referrals; identification and provision of safe, secure, functional, and physically accessible housing; access to other sources temporary housing assistance. (See *Recovery Support Plan*)
Human Services	Crisis counseling, disaster case management, and other supportive services for affected individuals; support acquiring non-governmental assistance (including but not limited to clean up, home repair, initial rebuilding, temporary housing assistance, emergency medications and medical equipment, counseling and spiritual care, childcare, in-kind donations, disaster legal services, etc.); support acquiring government benefits and disaster assistance programs for non-housing losses. (See *Recovery Support Plan*)

Core Capabilities: Mass Care Services; Logistics and Supply Chain Management; Public Health, Healthcare, and Emergency Medical Services; Critical Transportation; Fatality Management Services

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 6 supports all Lifelines, however the Lifeline which is most impacted by ESF 6 is the Food, Water, and Shelter Lifeline.

Other ESFs Overlap:
ESF 8: Health and Medical Services – Often when providing mass care, emergency assistance, temporary housing, and human services, medical support is needed. This medical support may include emergency medical response, long term medical support of the chronically ill, mental health services, and other needs. Tasks associated with these needs can be found in ESF 8 and may be referenced in this section.
ESF 11: Agriculture and Natural Resources – Veterinary services required for the evacuation and sheltering of animals (including but not limited to household pets, livestock/farm animals, laboratory animals, animals in zoos, and exotic animals) falls under ESF 11, but must be coordinated with ESF 6 to ensure individuals are able to visit their animals while sheltered. Please note that service animals must be kept with their owners and cannot be separated per the Americans with Disability Act (as amended).
ESF 13: Safety and Security – Wherever there are large numbers of people there will be a need for security at that location; areas of mass care including shelters will require security. Tasks supporting the security of areas of mass care including shelters and large-scale feeding operations can be found under ESF 13, as well as tasks which ensure the safety of children and vulnerable adults.
ESF 15: External Affairs – Communicating to the public the available services and resources which are found in ESF 6 requires coordination with various media outlets and appropriate messaging. Tasks in ESF 15 identify the methods and messages by which available services from ESF 6 are communicated.

Other Plans and Annexes:
MSP/EMHSD Publication 101d: Michigan Emergency Management Plan (MEMP) Recovery Support Plan - The activities and tasks identified in ESF 6 often directly lead to, and tie into, recovery support functions which can be found in the Recovery Support Plan.
MSP/EMHSD Publication (TBD): Michigan Disaster Logistics Management Plan – As of the 2022 publication of the MEMP the Michigan Disaster Logistics Management Plan is not yet published.

MSP/EMHSD Publication 101b: Michigan Evacuation and Mass Shelter Support Plan – The activities and tasks identified in the Evacuation and Mass Shelter Support Plan directly support and expand upon asks which are outlined in ESF 6; especially ESF 6 mass care and temporary housing tasks.
MSP/EMHSD Publication 101c: Michigan Disaster Animal Care Support Plan – The activities and tasks identified in the Disaster Animal Care Support Plan which support the sheltering and care of personal pets, support animals, and livestock evacuated with their owners may support some temporary housing tasks identified in EFS 6.

Tasks: Lead Agency
Michigan Department of Health and Human Services (MDHHS) – Human Services

1. Coordinate with ESF 6 partners in disaster human services planning to promote seamless transition to MDHHS-led Health and Social Services Recovery Support Function under the National Disaster Recovery Framework. (Protect)
2. Provide critical disaster relief and preparedness information to the public through proactive media in conjunction with ESF 15. (Mitigate)
3. Work with MSP/EMHSD to identify available mass care capacity, anticipate mass care requirements, and establish strategies to address gaps in coordination with local, state, tribal, and other Federal agencies; NGOs; and private sector partners. (Respond)
4. Provide assistance, as requested, to administer emergency human services programs. (Respond)
5. Facilitate, in conjunction with MSP/EMHSD, the coordination, planning, and mobilization among government, NGO, and private sector entities that provide mass care services in response to major disasters and in support of the state of Michigan. (Respond)
6. Provide situational awareness and Report on current mass care, emergency assistance, temporary housing, and human services activities before and during response operations. (Respond)
7. Provide subject matter expertise, consultation, and technical assistance to ESF 6 partners on disaster human services issues (e.g., accessing HHS programs that address human services needs in an emergency, effective human services delivery to children, persons with disabilities and others with access and functional needs, economically disadvantaged persons, and other individuals and families served by HHS programs). (Respond)
8. Provide technical assistance for shelter operations related to food, vectors, water supply, and waste disposal. (Respond)
9. Provide technical expertise in issues related to the assessment of health and medical needs of shelter occupants. (Respond)
10. Assist with monitoring of public health conditions that can affect the health of all shelter occupants, including shelter workers, in conjunction with ESF 8. (Respond)
    a. Coordinate, as needed, with the National Disaster Medical System (NDMS), and Disaster Medical Assistance Team (DMAT).
11. Facilitate deployment of volunteer health professionals for emergency responses. (Respond)
12. Coordinate with ESF 11 for the provision of qualified veterinary medical personnel for disaster-related veterinary care services. (Respond)
13. Provide for food preparation and stockpiling in its facilities during the incident, as well as facilities for mass sheltering, as needed. (Respond)
14. Coordinate an individual assistance needs assessment for wrap around services from voluntary organizations, human services, and other organizations. (Respond)
15. Identify volunteer opportunities for emergent volunteers in the MI Volunteer Registry or in collaboration with the MCSC, VAL, and Volunteer Manager. (Respond)
16. Work with state, Federal, voluntary, and private agency partners to develop a plan of operation that ensures timely distribution of food in good condition to the proper location, once need has been determined. (Respond)
17. Identify possible funding avenues to rent an alternate place to live, or for a temporary housing unit when rental properties are not available. (Recover)
18. Support the implementation of Other Needs Assistance: Provide medical, dental, funeral, personal property, transportation, moving and storage, and critical needs assistance. (Recover)
19. Coordinate the execution of the Federal Direct Housing Assistance: Provide temporary housing on private sites, commercial parks, or other temporary group sites. (Recover)
20. Coordinate the execution of funds for individuals to use a house. (Recover)
21. Coordinate and monitor the provision of human services to disaster survivors. (Recover)
22. Identify individuals and families requiring assistance under the State Emergency Relief Program. (Recover)
23. Identify individuals and families in need of crisis counseling assistance in coordination with other recovery agencies. (Recover)
24. Coordinate with the ARC to assist in family reunification. (Recover)
25. Provide liaisons to the federal Individuals and Households Program. (Recover)
26. Assist in identifying available housing resources. (Recover)

27. Reunite children with their parents and/or guardians through the following activities: (Response
    a. Establish a toll-free hotline, as well as teletypewriter (TTY) and video relay service (VRS) lines to receive reports of displaced children.
    b. Create a website that is compliant with Section 508 to provide information about displaced children.
    c. Deploy staff to the location of the declared disaster event to gather information about displaced children.
    d. Provide information to the public about additional resources.
    e. Partners with local, state, tribal, and Federal law enforcement agencies.
28. Refer reports of displaced adults to the Attorney General's designated authority and the National Emergency Family Registry and Locator System. (All)
29. Maintain liaison with local government and volunteer human services agencies. (All)
30. Implement and administer the Disaster Food Stamp Program. (All)

Michigan Department of Health and Human Services (MDHHS) – Health

1. Execute requirements for Critical Incident Stress Management (CISM) teams as defined by their training programs in conjunction with ESF 8. (Respond)
2. Assist in the provision of medical countermeasures, supplies, and services, including durable medical equipment in conjunction with ESF 8. (Respond)
3. Provide HHS medical workers to augment health services personnel as appropriate. (Respond)
4. Provide medical care and mental/behavioral health services for impacted populations either in or outside the shelter locations, in accordance with appropriate guidelines used by local health agencies. (Respond)
5. Coordinate emergency medical care, with ESF 8, in shelters, as needed and at the request of affected jurisdiction(s), in accordance with appropriate guidelines used by local health agencies. (Respond)
6. Coordinate closely with the National Center for Missing and Exploited Children (NCMEC), and ESF 13 to facilitate the expeditious reunification of pediatric patients displaced as a result of disaster. (Respond)
7. Provide medical supplies and services and medical workers to augment health services personnel to support mass care operations. (Respond)
8. Monitor and report damage and impacts to critical private sector facilities, infrastructure, and systems, private health and medical care facilities. (Respond)
9. Provide liaison to federal emergency health and medical programs and servicers (including behavioral health). (Respond)
10. Collect information to provide supplemental funding to locals for short-term crisis counseling services. (Recover)
11. Coordinate crisis counseling services with Community Mental Health Services Programs. (Recover)
12. Serve as lead state agency on human health issues including mental health; see ESF 8. (All)

American Red Cross (ARC)

NOTE: The American Red Cross is the co-lead for mass care and a support agency for ESF 6.

1. Provide assistance by assessing mass care shelter sites to ensure suitability and accessibility of facilities to safely shelter survivors. (Protect)
2. Support coordination and planning among government, NGO, and private sector entities that provide mass care services in response to disasters. (Prevent)
3. Support MSP/EMHSD in working with MDHHS for mass care in planning, preparedness, and response activities to include exercise participation. (Prevent)
4. Provide assistance, after a disaster, to meet immediate threats to life and property, including: congregate, and non-congregate sheltering and feeding; reunification services; distribution of emergency supplies; shelter and essential needs of service animals when accompanied by their owners (pet facilities are not operated by the ARC); support to children and adults with disabilities and others with access and functional needs in congregate facilities; warehousing and, in some situations, the distribution of donated materials. (Respond)
5. Work with MSP/EMHSD and MDHHS to identify available mass care capacity, anticipate mass care requirements, and establish strategies to address gaps in coordination with local, state, tribal, and federal agencies; NGOs; and private sector partners. (Respond)
6. Work closely with MSP/EMHSD at designated MSP and MDHHS locations to support ESF 6 mass care activities as requested. (Respond)
7. Provide situational awareness and Report on current mass care activities before and during response operations. (Respond)
8. In conjunction with MSP/EMHSD, encourage the mobilization of NGO and private sector partners for the provision of mass care services in support of the state of Michigan. (Respond)
9. Provide disaster-related shelter and feeding support and distribution of emergency supplies as able and appropriate. (Respond)
10. Provide disaster health- and mental health-related services for disaster impacted populations, either in or outside the shelter locations, in accordance with appropriate guidelines used by local health agencies. (Respond)

11. Coordinate emergency medical care in shelters, as needed, in accordance with appropriate guidelines used by local health and emergency medical agencies. (Respond)
12. Provide technical expertise in issues related to the assessment of health and medical needs of shelter occupants. (Respond)
13. Assist with monitoring of public health conditions that can affect the health of all shelter occupants, including shelter workers. (Respond)
14. Support Multi Agency Resources Centers (MARCs), in collaboration with state and local emergency management and other ESF 6 partner agencies, to provide survivors with a central location where they can receive information and services. (Recover)
15. May provide, in accordance with American Red Cross standards and procedures, financial or other direct assistance for immediate needs, including medical and funeral expenses resulting from a disaster. (Recover)
16. Advocates for replacement of and, where possible, replaces medical pharmaceuticals, supplies, and services, including durable medical equipment, lost as a result of the disaster. (Recover)
17. Coordinate with the MDHHS for the Disaster Health Services Team to provide licensed nurses with a pharmacy to ensure emergency prescriptions are filled. (Recover)
18. Support reunification efforts through its reunification services. (Recover)
19. Provide critical disaster relief and preparedness information to the public. (Recover)
20. Coordinate with the MDHHS to assist in family reunification. (Recover)
21. Assist veterans affected by disasters in collaboration with ARC Service to Armed Forces. (Recover)
22. Support the formation of a State-led, NGO and private-sector supported, Mass Care or Feeding Task Force to facilitate problem-solving during incidents when feeding is required for extended periods of time. (Recover)
23. Provide mass care technical assistance to MSP/EMHSD and serves as its principal mass care subject matter expert. (All)
24. Coordinate closely with the National Center for Missing and Exploited Children (NCMEC) to facilitate the expeditious reunification of unaccompanied children in ARC facilities as a result of disaster. (All)

Tasks: State Government Support Agencies

Governor's Office

1. Provide for temporary emergency housing. (Respond)

Michigan Department of Agriculture and Rural Development (MDARD)

1. Assist with and coordinate animal care and animal health in shelters. (Respond)
2. Coordinate an integrated Federal response to meet the mass care and emergency assistance needs of animals, including household pets, service animals, and their owners. (Respond)
3. Facilitate whole-community, multi-agency coordination with nongovernmental agencies for animal response activities. Provide technical assistance and subject matter expertise regarding animal response issues. (Respond)
4. Non-Stafford Act Authority: Locate and secure supplies of food in coordination with MDE, including U.S. Department of Agriculture (USDA) Foods in state and Federal inventories, to supplement those in the disaster area to the extent funds appropriated to FNS for disaster food assistance are available. (Respond)
5. Provide technical assistance for shelter operations related to food, vectors, water supply, and waste disposal. (Respond)
6. Identify and provide qualified veterinary medical personnel for events requiring veterinary medical services or public health support for household pets and service animals. (Respond)
7. Provide technical assistance for shelter operations related to food, vectors, water supply, and waste disposal. (Respond)
8. Coordinate and provide emergency and disaster-related veterinary medical care services to impacted animal populations and provide veterinary public health, zoonotic disease control, environmental health, and related services. (Respond)
9. Coordinate debris clearance, temporary roof repair, and elimination of identified health/safety hazards. (Recover)
10. Refer and direct recovery housing efforts to the USDA, which provides information (i.e., location, type, owners, and/or management service) on USDA-financed housing units that are available and habitable. (Recover)
11. Refer and direct disaster survivors with USDA Letters of Priority Entitlement, which allow the holder of the letter (i.e., identified evacuee and/or survivor) to go to the top of waiting lists for placement in USDA financed housing, to the appropriate USDA representatives. (Recover)
12. Resources will be assigned commensurate with each unit's level of training and the adequacy and availability of equipment. (All)
13. Assist in food procurement, safety, and sanitation, and the identification and establishment of warehousing and feeding facilities. (All)

Department of Attorney General (MDAG)

1. Reach out to local and state housing and community development partners to identify issues, provide support, and enforce the Fair Housing Act and compliance with other civil rights statutes. (All)

Department of Civil Rights (MDCR)

1. Intervene in tension-creating situations involving potential civil rights violations. (Prevent)
2. Ensure equal access to disaster related services. (Respond)
3. Provide subject matter expertise, consultation, and technical assistance to ESF 6 partners on disaster human services issues (e.g., accessing HHS programs that address human services needs in an emergency, effective human services delivery to children, persons with disabilities and others with access and functional needs, economically disadvantaged persons, and other individuals and families served by HHS programs). (Respond)
4. Monitor and advocate for the recovery needs of individuals with disabilities. (Recover)
5. Work with local and state partners to assess impacts to low-income families, and families with members with disabilities or other access and functional needs, in HUD-assisted housing. (Recover)
6. Work with partners to assess damages to HUD-assisted housing units, and identify timelines for repairs to help re-house low-income families and families with members with disabilities or other access and functional needs. (Recover)
7. Reach out to local and state housing and community development partners to identify issues, provide support, and enforce the Fair Housing Act and compliance with other civil rights statutes. (Recover)
8. Provide guidance, promulgate regulations, conduct investigations and compliance reviews, and enforce civil rights laws, including their general application to emergency management and specific application to mass care services, such as the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and the Civil Rights Act of 1964. (All)

Department of Education (MDE)

1. Authorize the use of USDA commodities for feeding disaster survivors. (Respond)
2. Stafford Act Authority (Section 412 and 413): Provide disaster food assistance in accordance with ESF 11 that includes USDA foods, infant formula, and infant food for emergencies and major disasters, as well as authorization of the Disaster Supplemental Nutrition Assistance Program for major disasters. (Respond)

Department of Environment, Great Lakes, and Energy (EGLE)

1. Provide technical assistance for shelter operations related to water supply and waste disposal. (Respond)
2. Coordinate the procurement of additional drinking water supplies, as required. (Respond)

MDHHS - Aging and Adult Services Agency (AASA)

1. Provide situational awareness and Report on current mass care activities before and during response operations. (Respond)
2. Provide canvassing, needs assessment, and information distribution support for state and Federal operations. (Respond)
3. During incident operations, assist the MDMVA, provide emergency healthcare services to veteran beneficiaries in VA medical facilities, to active-duty military personnel, and as resources permit, to civilians in communities affected by national security emergencies. (Respond)
4. Conduct a needs assessment of, and coordinate and monitor the provision of assistance to, elderly disaster survivors. (Respond)
5. Assist in identifying available housing resources. (Recover)
6. Identify and coordinate volunteer resources for recovery operations. (Recover)
7. Maintain liaison with the local government and volunteer human service agencies. (All)

Department of Insurance and Financial Services (DIFS)

1. Support the provision of financial assistance to eligible disaster survivors to repair damage to their pre-disaster primary residence. (Recover)
2. Disaster Unemployment Assistance: Provide unemployment benefits and re-employment services to individuals who have become unemployed because of major disasters. (Recover)
3. Legal Services: Provide free legal assistance to disaster survivors. (Recover)
4. Provide insurance information to disaster survivors. (Recover)
5. Implement appropriate economic stabilization measures. (Recover)

Department of Labor and Economic Opportunity (LEO)

1. Provide technical assistance related to worker safety and health issues. (MIOSHA) (Respond)
2. Provide interpreter/translator services, as required for disaster survivors. (Respond)

3. Provide unemployment benefits and re-employment services to individuals who have become unemployed because of major disasters. (Recover)
4. Execute requirements as defined under the Disaster Unemployment Assistance program to provide financial assistance to individuals whose employment or self-employment has been lost or interrupted as a direct result of a Presidentially declared disaster. (Recover)
5. Provide vocational rehabilitation services. (Michigan Rehabilitation Services and the Bureau of Services for Blind Persons) (Recover)
6. Provide grants, subject to available funding, to repair damage from the disaster to primary residences that is not covered by insurance or FEMA funding. (MSHDA) (Recover)
7. Provide Federal alcohol and tobacco excise tax refunds to businesses that have lost assets in a disaster. (Recover)
8. Provide unemployment assistance to disaster survivors (through the US Department of Labor's Disaster Assistance Program). (Recover)
9. Provide job training assistance to disaster survivors. (Recover)
10. Contact Dept of Ed Rehabilitation Services Administration to request disaster relief in the form of additional grant dollars and flexibilities. (Recover)
11. Provide technical assistance related to worker safety and health issues. MIOSHA (All)

LEO - Michigan Community Service Commission (MCSC)

1. Provide situational awareness and Report on current mass care activities before and during response operations. (Respond)
2. Coordinate emergency medical care in shelters, as needed, and at the request of affected jurisdiction(s), in accordance with appropriate guidelines used by local health agencies. (Respond)
3. Provide unaffiliated volunteer support and warehousing assistance. (Respond)
4. Repair: Provide grants to repair damage from the disaster to primary residences that is not covered by insurance. (Recover)
5. Execute requirements as defined under the Disaster Case Management Program, which provides services to assist survivors with developing and carrying out a disaster recovery plan. (Recover)
6. Provide medical care and mental/behavioral health services for impacted populations either in or outside the shelter locations in accordance with appropriate guidelines used by local health agencies. (Recover)
7. Coordination and possible deployment of teams of trained National Service Participants (including AmeriCorps members and Retired and Senior Volunteer Program volunteers), as requested by impacted jurisdictions to carry out a wide range of response support activities emphasizing disadvantaged communities and residents with disabilities and others with access and functional needs, including:
    a. Provide canvassing, needs assessment, and information distribution support for state and Federal operations.
    b. Provide shelter and feeding support and distribution of water, food, ice, and other emergency goods.
    c. Perform debris clearance, temporary roof repair, and elimination of identified health/safety hazards.
    d. Provide unaffiliated volunteer support and warehousing assistance.
    e. Perform registration and call center support.
    f. Provide case management assistance. (All)
8. Provide MI Volunteer Registry medical workers to augment health services personnel as appropriate in coordination with MDHHS. (All)

LEO - Michigan State Housing Development Authority (MSHDA)

1. Provide technical advice through staff to assist with mass care and housing operations through collaboration of the Asset Management (AM) and Rental Assistance and Housing Solutions (RAHS) groups in MSHDA. (Respond)
2. Provide assistance in contacting contractors to construct temporary shelter facilities, including accessible shelters, in the affected area, as required. (Respond)
3. Work with partners to assess damages and impacts to low-income families, families with members with disabilities and other AFN, and HUD-assisted housing units and identify timelines for repairs to help re-house low-income families and families with members with disabilities or other access and functional needs. (Respond)
4. Provide temporary housing assistance for functional needs populations in coordination with MDHHS-Human Services. (Recover)
5. Provide housing assistance to low- and moderate-income disaster survivors. (Recover)
6. Assist in the identification and procurement of additional temporary housing resources. (Recover)
7. Coordinate with ESF 6 partners and the private sector to identify available and physically accessible housing resources and provide this information to disaster survivors. (Recover)

8. Provide financial and/or direct assistance to eligible survivors (through federal funding) for their disaster-related lodging and temporary housing needs, including physically accessible housing. (Recover)
9. Provide funding for the repair of multi-family housing in order to house disaster survivors when funds are available through AM or RAHS. (Recover)
10. Temporary Housing: Provide funds to rent an alternate place to live or for a temporary housing unit when rental properties are not available. (Recover)
11. Replacement: Provide funds, up to the program limit, for home replacement through a loan program when funds are available, and insurance or FEMA funding is not available. (Recover)
12. Semi-Permanent or Permanent Housing Construction: Provide financial or direct assistance to construct permanent or semi-permanent housing when funding is available. (Recover)
13. Work with local and state partners to assess impacts to low-income families and families with members with disabilities or other access and functional needs in HUD-assisted housing; and help support re-housing efforts with community partners. (Recover)
14. Provide available HUD staff via mission assignments to help address housing and community development issues through existing programs and resources. When requested and funded by FEMA, Administer the Disaster Housing Assistance Program. (Recover)
15. Work with HUD grantees, owner/operators, and industry groups to locate vacancies into existing state housing for use by FEMA and state caseworkers to house low-income households; there is no comprehensive list of all available vacancies, so many partners may be contacted. (Recover)
16. Reach out to local and state housing and community development partners to identify issues, provide support, and enforce the Fair Housing Act and compliance with other civil rights statutes. (All)

Department of Licensing and Regulatory Affairs (LARA)

1. Provide guidance, promulgate regulations, conduct investigations and compliance reviews, and enforce Federal civil rights laws, including their general application to emergency management and specific application to mass care services, such as the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and the Civil Rights Act of 1964. (Protect)
2. Provide construction, engineering, and project management expertise and support for temporary (accessible) housing and sheltering (to include management of temporary roofing support following disasters). (Recover)
3. Coordinate the establishment of group mobile home sites for temporary disaster housing. (Recover)
4. Provide licensing information to disaster survivors. (Recover)
5. Expedite licensing for facilities and individual homes, as needed. (Recover)
6. Implement appropriate economic stabilization measures. (Recover)
7. Retain a list of licensed transitional healthcare facilities such as adult foster care homes, long term care (nursing home) facilities, homes for the aged, and childcare. (These licensed facilities may be used to identify available and physically accessible housing resources for disaster survivors. These do not include) (All)
8. Retain a list of licensed interpreters who can be contacted in case of emergency. (All)

LARA -Bureau of Fire Services (BFS)

1. Inspect mass care shelter sites to ensure suitability and accessibility of facilities to safely shelter survivors.
    a. Provide inspections for schools, fire safety, and other regulations. (Prevent)
2. Provide expedited post-disaster licensed facility inspections. (Recover)

Department of Military and Veteran Affairs (DMVA)

1. Develop and maintain plans to make available housing assets that are habitable, to which VA has title and possession, for use by survivors in catastrophic disasters. (Protect)
2. Provide emergency healthcare services to veteran beneficiaries in VA medical facilities, to active-duty military personnel, and as resources permit, to civilians in communities affected by national security emergencies, during incident operations. (Respond)
3. Carry out medical Support Assignments. (Respond)
    a. Provide Crisis Intervention Stress Management (CISM) Support.
    b. Assist/support the MDHSS-Health and local health departments in the distribution and administration of vaccines and antidotes to the public.
4. Carry out sheltering and Logistics Task Assignments. (Respond)
    a. Provide mass feeding support at shelters.
    b. Identify/mobilize shelter volunteers from the Michigan Volunteer Defense Force.
5. Administer the laws providing benefits and other services to veterans and the dependents and beneficiaries of veterans. (Respond)

6. During incident operations, provide emergency healthcare services to veteran beneficiaries in VA medical facilities, to active-duty military personnel, and as resources permit, to civilians in communities affected by national security emergencies. (Respond)
7. Provide shelter and feeding support and distribution of water, food, ice, and other emergency goods. (Respond)
8. May provide for food preparation and stockpiling in its facilities during the incident, as well as facilities for mass sheltering. (Respond)
9. Provide medical supplies and services and medical workers to augment health services personnel to support mass care operations. (Respond)
10. Provide assistance for veterans with disabilities or other access and function needs to retrofit their homes with necessary accessibility measures (e.g., wheelchair ramp). (Recover)
11. Work with lenders concerning foreclosure/waiver/underwriting/credit protection flexibilities related to VA-issued home loans. (Recover)
12. Assist veterans affected by disasters to help them avoid defaulting on existing home mortgages and/or foreclosure on their homes, as well as assistance for veterans with disabilities or other access and function needs to retrofit their homes with necessary accessibility measures (e.g., wheelchair ramp). (Recover)
13. Protect patients/residents, staff, and visitors at the Jacobetti and Grand Rapids Homes for veterans. (All)

Department of Natural Resources (MDNR)

1. If available, provide appropriate resources (e.g., cots, blankets, sleeping bags, personnel) for shelters. (Respond)
2. Provide security support at shelters in collaboration with ARC, MDHHS, and MI VOAD partners. (Respond)
3. Identify and provide shelter space at state parks and recreation areas, as required. (Respond)

Department of State (MDOS)

1. Provide branch office facilities for use as Disaster Recovery Centers. (Recover)
2. Provide Letters of Priority Entitlement, allowing the holder of the letter (i.e., identified evacuee and/or survivor) to go to the top of waiting lists for placement in USDA financed housing. (Recover)

Michigan State Police (MSP)

1. Reunite children with their parents and/or guardians through the following activities (also in coordination with ESF 13): (Respond)
    a. Establish a toll-free hotline as well, as teletypewriter (TTY) and video relay service (VRS) lines to receive reports of displaced children.
    b. Create a website that is compliant with Section 508 to provide information about displaced children.
    c. Deploy staff to the location of the declared disaster event to gather information about displaced children.
    d. Provide information to the public about additional resources.
    e. Refer reports of displaced adults to the Attorney General's designated authority and the National Emergency Family Registry and Locator System.
2. Provide essential assistance, including life-sustaining services, after a major disaster to meet immediate threats to life and property, including distribution of emergency supplies; mass evacuation; support to children and adults with disabilities and others with access and functional needs in congregate facilities. (#Loc) (Respond)
3. Coordinate closely with the National Center for Missing and Exploited Children (NCMEC) to facilitate the expeditious reunification of pediatric patients displaced as a result of disaster- efforts lead by MSP. (All)
4. Serve as the state's resource on the issues of missing and sexually exploited children in partnership with MDHHS. (All)
5. Provide information and resources to law enforcement, parents, guardians, children (including child victims), and other professionals. (All)

MSP - Emergency Management Homeland Security Division (EMHSD)

1. Facilitate coordination and planning among government, NGO, and private sector entities that provide mass care services, emergency assistance, temporary housing, and human services in response to major disasters. (Protect)
2. Monitor provision of human services in Presidentially and gubernatorial-declared disasters. (Respond)
3. Assist with monitoring of public health conditions that can affect the health of all shelter occupants, including shelter workers. (Respond)
4. Facilitate registration and call center support for a disaster with partners including 211 and the ARC. (Respond)
5. Coordinate the provision of essential assistance, including life-sustaining services, after a major disaster to meet immediate threats to life and property, including: congregate, non-congregate, and transitional sheltering and feeding; reunification services; distribution of emergency supplies; rescue, transportation, care, shelter and essential needs of household pets and service animals; mass evacuation; support to children and adults with disabilities and others with access and functional needs in congregate facilities; warehousing and distribution of

donations; emergency residential roof covering; and emergency repair of primary residences damaged as the result of a disaster. (Respond)

6. Coordinate the identification and procurement of additional temporary housing resources, as required. (Recover)
7. IA tracking of impacted children for federal programs made available as needed. (Recover)
8. Post-recovery information on the SOM web site and appropriate social media outlets. (Recover)
9. When requested and funded by FEMA, administer the Disaster Housing Assistance Program. (Recover)
10. Facilitate the provision of case management assistance, including requesting federal case management support and facilitating other agencies in case management assistance. (Recover)
11. Identify resources available for survivors' disaster-related needs and make referrals to appropriate state and federal agencies, and NGO's that provide disaster relief. (Recover)

Department of Technology, Management, and Budget (DTMB)

1. Provide essential assistance, including life-sustaining services, after a major disaster to meet immediate threats to life and property, including: distribution of emergency supplies; warehousing and distribution of donations; emergency residential roof covering; and emergency repair of primary residences damaged as the result of a disaster. (Respond)
2. Work closely with MSP/EMHSD, at designated MSP and MDHHS locations, to support ESF 6 mass care activities as requested. (Respond)
3. Provide state-contracted supplies and services to support functional-needs population-sheltering operations. (Respond)
4. Activate the state's donations management website, as required. (Respond)
5. Assist in the procurement of additional drinking water supplies, as required. (Respond)
6. Assist the MDHHS with the transportation and distribution of the Strategic National Stockpile (SNS). (Respond)
7. Through the Office of the State Employer, provide post-incident counseling assistance to affected state employees. (Recover)
8. Monitor the reentry of evacuated DTMB owned/managed facilities. (Recover)

Department of Transportation (MDOT)

1. Provide essential assistance, including life-sustaining services, after a major disaster to meet immediate threats to life and property, including mass evacuation. (Respond)
2. Secure additional mass transportation resources for evacuations. (Respond)

Department of Treasury (MDT)

1. Issue emergency payments. (Respond)
2. Provide financial assistance to eligible disaster survivors to repair damage to their pre-disaster primary residence. (Recover)
3. Provide Federal alcohol and tobacco excise tax refunds to businesses that have lost assets in a disaster. (Recover)
4. Assist disaster survivors by expediting replacement or redemption of U.S. savings bonds and may waive the minimum holding period for Series EE and I savings bonds presented to authorized paying agents for redemption. (Recover)
5. Assist survivors with filing claims for tax refunds and provide tax information and assistance. (Recover)
6. May postpone tax deadlines to provide extra time to file and pay before assessing any penalty or additional amount to the tax and executes agreement to supplement DHS/FEMA's tele-registration capabilities. (Recover)
7. Provide tax assistance to individuals and business disaster survivors. (Recover)

Tasks: Federal Government Support Agencies

United States Army Corp of Engineers (USACE)

1. Provide construction, engineering, and project management expertise and support for temporary housing and sheltering (to include management of temporary roofing support following hurricane disasters). (Respond)
2. Provide assistance by inspecting mass care shelter sites to ensure suitability and accessibility of facilities to safely shelter survivors. (Respond)
3. Provide assistance in constructing temporary shelter facilities, including accessible shelters, in the affected area as required. (Respond)

United States Postal Service (USPS)

1. Provide extended mail services to relocated persons. (Recover)

Tasks: Nonprofit Organization Partners

Michigan Voluntary Organizations Active in Disaster (MI VOAD)

The MI VOAD is a collaborative group of voluntary organizations which assist disaster survivors, communities, and the State of Michigan following an incident. As voluntary organizations, those in the MI VOAD who do not have their own contract or MOU with the State of Michigan (such as the ARC) are not required to assist in disaster response, recovery, or other mission areas. However voluntary organizations may offer their resources, services, expertise, or other assistance in coordination with the State of Michigan to better serve disaster survivors, communities, and impacted areas. Below listed are some available activities which the MI VOAD may assist with (but is not required to).

MI VOAD is a coordinating entity which supports the work of its member agencies. In addition to coordination, it gathers and shares information and serves as a point-of-contact with National VOAD. Red Cross (ARC) tasks are listed under ARC and are not included in MI VOAD, although ARC is a member of MI VOAD.

1. Work with MSP/EMHSD to identify available mass care capacity, anticipate mass care requirements, and establish strategies to address gaps in coordination with local, state, tribal, and other Federal agencies; NGOs; and private sector partners. (Protect)
2. MI VOAD member agencies may provide essential assistance, including life-sustaining services, after a major disaster to meet immediate threats to life and property, including: congregate, non-congregate, and transitional sheltering, feeding; reunification services; distribution of emergency supplies; rescue, transportation, care, shelter and essential needs of household pets and service animals; mass evacuation; support to children and adults with disabilities and others with access and functional needs in congregate facilities; warehousing and distribution of donations; emergency residential roof covering; and emergency repair of primary residences damaged as the result of a disaster. (Respond)
3. Provide situational awareness and Report on current mass care activities, emergency assistance, temporary housing and human services before and during response operations. (Respond)
4. (In conjunction with MSP/EMHSD) Facilitate the mobilization of NGO and private sector partners for the provision of mass care services, emergency assistance, temporary housing and human services in support of the state of Michigan. (Respond)
5. Provide shelter and feeding support and distribution of water, food, ice, and other emergency goods. (Respond)
6. Provide unaffiliated volunteer support and warehousing assistance. (Respond)
7. Perform registration and call center support. (Respond)
8. Provide case management assistance. (Respond)
9. May provide for food preparation and stockpiling in its facilities during the incident, as well as facilities for mass sheltering. (Respond)
10. Provide medical care and mental/behavioral health services for impacted populations either in or outside the shelter locations in accordance with appropriate guidelines used by local health agencies. (Respond)
11. Assist in the provision of medical supplies and services, including durable medical equipment. (Respond)
12. Coordinate emergency medical care in shelters, as needed and at the request of affected jurisdiction(s), in accordance with appropriate guidelines used by local health agencies. (Respond)
13. Participate in and establish Multi Agency Resource Centers (MARCs) with other ESF 6 partner agencies and affected states to provide survivors with a central location where they can receive information and services. (Recover)
14. May provide Crisis Counseling and may provide supplemental funding for short-term crisis counseling services. (Recover)
15. May provide Transportation Assistance, which is physically accessible transportation assistance to relocate or return individuals displaced from their pre-disaster primary residences or to and from alternative locations as a result of a declared disaster. (Recover)
16. May provide Disaster Case Management or may provide financial assistance to local or state government agencies or qualified private organizations to enact disaster case management. (Recover)
17. May assist veterans affected by disasters to help them avoid defaulting on existing home mortgages and/or foreclosure on their homes, as well as assistance for veterans with disabilities or other access and function needs to retrofit their homes with necessary accessibility measures (e.g., wheelchair ramp). (Recover)
18. Execute requirements as defined under the Disaster Case Management Program, if awarded, which provides services to assist survivors with developing and carrying out a disaster recovery plan. (Recover)

Private Sector Partners

1. Establish Multi Agency Resource Centers (MARCs) with other ESF 6 partner agencies and affected counties to provide survivors with a central location where they can receive information and services. (Recover)

ESF 7: LOGISTICS

Definition/Purpose: The purpose of ESF 7 is to integrate whole-community logistics, incident planning, and support for timely and efficient delivery of supplies, equipment, services, and facilities. Also, to facilitate comprehensive logistics planning, technical assistance, training, education, exercise, incident response, and sustainment that leverage capability and resources of State logistics partners, public and private stakeholders, and nongovernmental organizations (NGOs) in support of both responders and disaster survivors.

Scope: Activities in this ESF support disaster response and recovery through the coordination of supplies, equipment, services, and facilities used in all phases of disaster response. Coordination between resource sourcing; acquisition; delivery of supplies, equipment, and services; resource tracking; facility space acquisition; transportation coordination; and management and support of information technology systems services and other administrative services are critical to this function. Primary functional responsibilities in ESF 7 include:

- Managing collaborative and complex logistical supply chains providing equipment, supplies, and services for incidents requiring a whole community response.
- Integrating whole-community logistic partners through collaboration in planning, sourcing, acquisition, utilization, and disposition of resources.
- Communicating and collaborating with supply chain elements to leverage recovery efforts in impacted efforts and establish local or tribal self-sufficiency quickly.

Core Capabilities: Information and Planning, Resource Support.

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 7 supports multiple Lifelines in one way or another.

Other ESF overlap:
ESF 14: Cross Sector Business and Critical Infrastructure – Many private sector partners provide supplies, equipment, and services to the disaster response and recovery efforts, and may be integral in the planning, sourcing, acquisition, utilization, and disposition of these resources.

Other Plans and Annexes:
Disaster Logistics Management Plan: Publication (TBD) – As of the 2022 publication of the MEMP the Michigan Disaster Logistics Management Plan is not yet published.
Disaster Distribution Management Plan: Publication (TBD) - The Disaster Distribution Management Plan details the disaster distribution activities that occur in a complex incident requiring additional logistical support beyond what is described in ESF 7.

Other Areas of Interest:
ESF 7: Resource Management is one of the major components of the NIMS. Therefore, ESF 7 - Logistics, is activated in every incident.

Tasks: All Agencies

1. Provide transportation assets and services contracts in support of the Mass Evacuation Incident Annex. (Respond)
2. Provide available space, buildings, airports, and telecommunications, as may be required, for emergency support operations. (Respond)

Tasks: Lead Agency
MSP- Emergency Management and Homeland Security Division (EMHSD)

1. Facilitate building and maintaining the Logistics Management and Resource Support capabilities of the SEOC with ESF 7 stakeholders by coordinating the ESF 7 portion of the integrated preparedness cycle which includes (Prepare):
    a. Coordination of the development and maintenance of logistics plans, procedures, checklists, and job aids.
    b. Organizing structures including coordination of the SEOC Logistics Committee and other teams to support ESF 7 capabilities
    c. Coordinating training efforts for logistics stakeholders in collaboration with the EMHSD Training Unit.
    d. Coordinating exercising efforts for logistics capabilities in collaboration with the EMHSD Exercise Unit.
2. Collaborate and synchronize resource support efforts with whole community disaster logistics response partners. (Protect)

3. Facilitate development and execution of the public and private sector services and resources logistics supply chain strategy. (Protect)
4. Establish interagency agreements with other State departments and agencies/NGOs; memorandum agreements/memorandums of understanding; and standby logistics contracts. (Protect)
5. Provide assistance with pre-planning requirements and creating milestones; assist with developing lifecycle cost, and provide guidance to pre-award activities including acquisition plan, statement of work, scope of objectives, performance work statement, market research, small business set-aside requirements, and congressional inquiries. (Protect)
6. Provide planning and response coordination for the provision of mass feeding, sheltering, and other services for survivors of disasters to include pets. (Protect)
7. Serve as a single point of integration and coordination for logistics support as part of the state response effort. (Respond)
8. Set up and operate incident facilities. (Respond)
9. Coordinate logistics response for incident facilities with DTMB. This support includes location, setup, voice and data communications, and other logistical support. (Respond)
10. Provide a single-point ordering process via MI CIMS. (Respond)
11. Provide safeguards and accountability for state property and equipment assigned to the incident. (Respond)
12. Provide assistance with seeking alternative resources or solutions that are in the best interest of the government; and assist with developing lifecycle cost estimates for EMHSD-administered grants and fostering partnerships with other government agencies. (Respond)
13. Provide commodities distribution assistance and expertise in alignment with the *Distribution Management Plan*. (Respond)
14. Manage and direct SOM-contracted transportation resources assigned to the incident. (Respond)
15. Provide personnel knowledgeable in state procurement and distribution operations in conjunction with ESF 5. (Respond)
16. Activate the EMHSD SEOC Logistics Section. (Respond)
17. Secure resources through mutual aid (including, but not limited to, EMAC/NEMAC/MEMAC) as appropriate. (Respond)
18. Coordinate with state agencies and local jurisdictions to provide resources in response to external interstate or international resource requests through EMAC and NEMAC, and coordinate with foreign states regarding gifts and other offers of support. (Respond)
19. Provide logistical support for deploying ESF 8 medical elements required and coordinate the use of mobilization centers/staging areas; transportation of resources; use of disaster fuel contracts; emergency meals; potable water; base camp services; supply and equipment resupply; and use of all national contracts and interagency agreements managed by DTMB for response operations. (Respond)
20. Implement the *Michigan Disaster Logistics Management Plan*, as required. (Respond)
21. Provide technical assistance to the MDHHS-Human Services and the MCSC for disaster donations management, as required. (Respond)
22. Develop and maintain core capability logistics support requirements and capabilities, and visibility of resources. (Recover)
23. Conduct resource inventory searches to fill anticipated or identified resource needs. (Recover)

Tasks: State Government Support Agencies

Governor's Office

1. Utilize the available resources of the political subdivisions of the state and/or commandeer or utilize private property under the authority given in Section 5 of 1976 PA 390, as amended, if reasonably necessary to cope with a disaster or emergency, (Respond)
2. Authorize the use of state resources. (All)
3. Seek assistance from the federal government. (All)

Michigan Department of Agriculture and Rural Development (MDARD)

1. Provide planning and response coordination for the provision of mass feeding, sheltering, and other services for survivors of disasters to include pets. (Protect)
2. Provide feeding support, including meeting specific needs of infants and toddlers, in collaboration with MDHHS. (Respond)
3. Provide staff to support incident facilities facility, property, telecommunications, and transportation management. (Respond)
4. Assist in food procurement, safety, and sanitation, and the identification and establishment of warehousing and feeding facilities. (Respond)

Department of Corrections (MDOC)

1. Set up and operate incident facilities. (Respond)
2. Provide facility management support. (Respond)
3. Provide resources to support emergency operations. (Respond)
4. Provide warehousing support and management. (Respond)

Department of Education (MDE)

1. Provide feeding support, including meeting specific needs of infants and toddlers. (Respond)

Department of Environment, Great Lakes, and Energy (EGLE)

1. Coordinate the procurement of additional drinking water supplies as required. (Respond)

Department of Health and Human Services (MDHHS) – Human Services

1. Provide planning and response coordination with Federally recognized tribes and Bureau of Indian Affairs (BIA). (Prevent)
2. Facilitate the deployment of volunteer health professionals for emergency response. (Respond)
3. Provide resources to support emergency operations. (Respond)
4. Identify volunteer opportunities for emergent volunteers. (Respond)
5. Identify and coordinate volunteer resources for recovery operations. (Respond)
6. Coordinate the procurement of additional medical countermeasures, as required. (Respond)
7. Provide planning and response coordination for the provision of mass feeding, sheltering, and other services for survivors of disasters, to include pets. (Respond)
8. Provide feeding support, including meeting specific needs of infants and toddlers. (Respond)
9. Provide technical assistance to identify and procure medical supplies and other medical services. (Respond)

Department of Labor and Economic Opportunity (LEO)

1. Provide technical personnel to assist in the identification and recruitment of individuals with specialized occupations needed to support response operations. (Respond)
2. Provide students and instructors capable of providing support. (Respond)
3. Provide engineering services to determine the cause or location of an event, performs structural integrity analysis, and recommends hazard mitigation. (Respond)
4. Identify, locate, and if necessary, recruit personnel needed to support incident operations after appropriate coordination with DTMB. (Respond)

LEO - Michigan State Housing Development Authority (MSHDA)

1. Coordinate the use of Bureau of Services for Blind Persons (BSBP) Training Center to support emergency operations. (Respond)

LARA -Bureau of Fire Services (BFS)

1. Provide staff to support incident facilities, facility, property, telecommunications, and transportation management through ESF 4. (Respond)
2. Coordinate and monitor local fire service mutual aid assistance. (Respond)

LARA - Michigan Public Service Commission (MPSC)

1. In accordance with ESF 12, coordinate with energy industries to assist in satisfying critical fuel, and electrical power needs unable to be met by local, state, tribal, or Federal resources or actions. (All)

Department of Military and Veteran Affairs (DMVA)

1. Maintain caches of medical equipment, supplies, and pharmaceuticals to support response teams. (Protect)
2. Provide personnel knowledgeable in Federal procurement and distribution operations. (Respond)
3. Provide computer support operations as appropriate – may include technical assistance. (Respond)
4. Carry out Task Assignments related to: (Respond)
    a. Sheltering and Logistics.
    b. Transportation Support.
    c. Logistics Support.
    d. Militances Support.
    e. Aviation/Airlift Support.
5. Provide medical supply/resupply contract capability. (Respond)
6. Provide technical assistance to identify and procure medical supplies and other medical services. (Respond)

7. Provide staff to support incident facility, property, telecommunications, and transportation management. (Respond)
8. Provide planning support; subsistence; administrative supply; petroleum product; engineering and construction supply; water and mobile units; medical material; telecommunications management; and transportation management support when approved by DOD. (Respond)
9. Provide a robust capability of mobile field elements and logistics support teams as requested. (Respond)
10. Support the hauling, installing, operations, and maintenance of generators for critical public facilities and provide generator lease and purchase support as required. (Respond)

Department of Natural Resources (MDNR)

1. Provide staff to support incident facility, property, telecommunications, and transportation management. (Respond)
2. Supplement transportation and equipment resources. (Respond)

Michigan State Police (MSP)

1. Coordinate prevention, preparedness, and mitigation activities among transportation infrastructure stakeholders within the authorities and resource limitations of ESF 1 agencies. (Protect)
2. Provide staff to support incident facilities, facility, property, telecommunications, and transportation management. (Respond)
3. Coordinate with the transportation industry for additional resources to support emergency operations. (Respond)
4. Provide specialized support resources to support emergency operations: Canine Unit, Underwater Recovery Unit, Emergency Support Team, Aviation Uni, Forensic Science Division, Fire Investigators, Bomb Squad. (Respond)
5. Coordinate temporary alternative transportation solutions when systems or infrastructure are damaged or overwhelmed. (Respond)
6. Coordinate the stabilization and reestablishment of transportation systems and infrastructure in coordination with MDOT. (Recover)

Department of Technology, Management, and Budget (DTMB)

1. Establish interagency agreements with other State departments and agencies/NGOs; memorandum agreements/memorandums of understanding; and standby logistics contracts. (Protect)
2. Provide assistance with pre-planning requirements and creating milestones; assist with developing lifecycle cost; and provide guidance to pre-award activities including acquisition plan, statement of work, scope of objectives, performance work statement, market research, small business set-aside requirements, and congressional inquiries. (Protect)
3. Set up and operate incident facilities. (Respond)
4. Provide transportation assets and services contracts in support of the Mass Evacuation Incident Annex. (Respond)
5. Manage and direct SOM-contracted transportation resources assigned to the incident response. (Respond)
6. Provide planning and response coordination for the provision of mass feeding, sheltering, and other services for survivors of disasters to include pets. (Respond)
7. Provide planning and response coordination with private sector businesses, associations, and other entities. (Respond)
8. Close affected state-managed facilities and authorize the usage of administrative leave. (Respond)
9. Provide state-contracted supplies and services to support functional needs population sheltering operations. (Respond)
10. Coordinate requests for supplemental office space to support emergency operations. (Respond)
11. Activate the State's donations management website, as required. (Respond)
12. Provide staff to support incident facilities, facility, property, telecommunications, and transportation management. (Respond)
13. Provide support in the delivery of information/supplies to disaster survivors. (Respond)
14. Coordinate the use of state facilities and equipment to support emergency operations: office equipment and materials, governmental surplus warehouses, distribution of needed materials, operational authority over the use of all state facilities, passenger vehicles, trucks, and construction equipment. (Respond)
15. Provide commodities-distribution assistance and expertise. (Respond)
16. Support the hauling, installing, operations, and maintenance of vendor-based generators for critical public facilities and provide vendors for generator lease and purchase support as required. (Respond)
17. Provide technical expertise on structural surveys and the procurement of external consulting services through the Interagency Committee on Seismic Safety in Construction/Building and Fire Research Laboratory of the National Institute of Standards and Technology. This procedure is necessary to assess the structural and fire safety of Federal and non-Federal damaged buildings and lifelines (e.g., public works and utilities). (Respond)

18. Coordinate with real estate/leasing specialist (from either the DTMB Real Estate Division or other identified subject matter expert) and MSP/EMHSD to assist with the selection of a location for a state site. (Respond)
19. Provide emergency relief supplies, facility space, office equipment, office supplies, telecommunications support, transportation services, and contracting services through a centralized acquisition channel. (Respond)
20. Provide support for requirements not specifically identified in other ESFs, including excess and surplus property disposal. (Respond)
21. Work cooperatively with MSP/EMHSD Logistics to provide an integrated process for the collaborative implementation of the logistics capability of Federal agencies, public and private sector partners, and NGOs. (Respond)
22. Coordinate the assessment, repair, and restoration of damaged state facilities. (Recover)
23. Leverage efficiencies in vendor networks and maximize full capacity across all partners. (All)
24. Manage or acts as contracting officer's representative for supporting contracts if disaster warrants. (All)
25. Identify access control issues relative to the continued operation of critical state functions at state office facilities. (All)
26. Provide information on state-contracted supplies and services for emergency procurement to requesting state agencies. (All)
27. Provide space for vital records storage. (All)

Michigan Department of State Employer (MOSE)

1. Grant administrative leave to the affected state employees. (Response)

Department of Transportation (MDOT)

1. Coordinate prevention, preparedness, and mitigation activities among transportation infrastructure stakeholders within the authorities and resource limitations of ESF 1 agencies. (Protect)
2. Provide support in the delivery of information/supplies to disaster survivors. (Respond)
3. Provide air services support for emergency transportation and documentation. (Respond)
4. Secure additional mass transportation resources for evacuation. (Respond)
5. Coordinate temporary alternative-transportation solutions when systems or infrastructure are damaged or overwhelmed. (Respond)
6. Provide transportation assets and services contracts in support of the Mass Evacuation Incident Annex. (Respond)

Tasks: Federal Government Support Agencies

United States Army Corp of Engineers (USACE)

1. Provide construction materials and engineering services as required. (Respond)
2. Provide a robust capability of mobile field elements and logistics support teams as requested. (Respond)
3. Provide commodities distribution assistance and expertise to include points of distribution training and state-level project management support for commodities missions. (Respond)
4. Support the hauling, installing, operations, and maintenance of generators for critical public facilities and provide generator lease and purchase support as required. (Respond)

United States Postal Service (USPS)

1. Provide support in the delivery of information/supplies to disaster survivors. (All)

Tasks: Nonprofit Organization Partners

American Red Cross (ARC)

1. Provide support to develop the whole-community logistics supply chain through synchronization of pre-planning activities and coordination during responses to major disasters. (Prevent)
2. Provide planning and response coordination for the provision of mass feeding, sheltering, and other services for survivors of disasters. (Respond)
3. Support local emergency management's efforts to coordinate pet sheltering with local resources by articulating the needs of pet owners residing in shelters. (Respond)

Auxiliary Communications (AUXCOMM)

1. Assist in establishing that a suitable JFO facility or other state or federal site is acquired and ready to occupy within 72 hours of receiving EMHSD requirements and/or EMHSD acceptance of the space to include provision of communications, office furniture, equipment, and office supplies. (Respond)
2. In support of ESF 2, assist in coordinating the provision of commercial telecommunications assets within the incident area. (Respond)
3. Provide telecommunications management support. (All)

Michigan Voluntary Organizations Active in Disaster (MI VOAD)

1. Provide subject matter expertise and participate in planning and response activities as they relate to survivors, to include those with disabilities or AFN. (Protect)
2. Provide planning and response coordination for the provision of mass feeding, sheltering, debris cleanup, basement muck outs and restoration, and other services for survivors of disasters. (Respond)
3. Facilitate information sharing before, and during, a response by its member organizations. (All)

ESF 8: PUBLIC HEALTH AND MEDICAL SERVICES

Definition/Purpose: The purpose of ESF 8 is to provide a mechanism for state assistance to supplement local, tribal, and area resources in response to a disaster, emergency, or incident that may lead to a public health, medical, behavioral, or human service emergency, including those that have international implications.

Scope: Activities in this ESF provide planning and coordination of health and public health in the State of Michigan, healthcare delivery, and emergency response systems to minimize and prevent health related emergencies. Primary functional responsibilities in ESF 8 include:

- Detecting and characterizing health incidents.
- Providing medical care and human services to affected survivors.
- Reducing public health and human services effects on the community.
- Enhancing community resiliency to respond to a disaster.

ESF 8 spans many fields of public health and medical services, including but not limited to:

- Patient movement, care, and behavioral health.
- Supporting human services by assisting those with disabilities, vulnerabilities, and access and functional needs.
- Delivering surge capabilities to augment public health, medical, behavioral, and veterinary functions.
- Coordinating with health professionals and pharmaceuticals.
- Distributing and delivering medical countermeasures, equipment, supplies, and technical assistance.
- Disseminating public health information and protective actions related to health or environmental threats.
- Assisting with fatality management responsibilities through specialized teams and equipment for victim identification, grief counseling and consultation, and reunification of human remains and personal effects.
- Mitigating, through the environment, health concerns.

Overall ESF 8 focuses on the following core functional areas:

- Assessment of public health/medical needs.
- Health surveillance.
- Medical surge.
- Health/medical/veterinary equipment and supplies.
- Patient movement.
- Patient care.
- Safety and security of drugs, biologics, and medical devices.
- Blood and tissues.
- Food safety and defense.
- Agriculture safety and security.
- All-hazards public health and medical consultation, technical assistance, and support.
- Behavioral healthcare.
- Public health and medical information.
- Vector control.
- Guidance on potable water/wastewater and solid waste disposal.
- Mass fatality management, victim identification, and mitigating health hazards from contaminated remains.
- Veterinary medical support

Core Capabilities: Public Information and Warning, Critical Transportation, Environmental Response/Health and Safety, Mass Care Services, Logistics and Supply Chain Management, Public Health/Healthcare/and Emergency Medical Services

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 8 supports multiple Lifelines, however the Lifeline most impacted by ESF 8 is the Health and Medical Lifeline.

Other ESF Overlap:
ESF 6: Mass Care, Emergency Assistance, Temporary Housing, and Human Services – Activities in ESF 6 often overlap with activities in ESF 8, including the provision of emergency medical assistance; maintenance and evaluation of public health in shelters, temporary housing, and other mass care facilities; and the delivery of short- and long- term recovery assistance through behavioral healthcare and other core functions.
ESF 11: Agriculture and Natural Resources – ESFs 11 and 8 overlap in a few different ways. Plant and animal disease may impact the health and wellness of the public in a variety of different ways, thereby requiring coordination between these two ESFs. In addition, the sheltering and management of animals in disasters requires coordination between ESFs 6, 8, and 11.
ESF 15: External Affairs – It may become necessary to distribute emergency health information to the populations impacted by an incident, which requires coordination between ESF 15 and 8, especially with regards to concerns such as protective action orders.

Other Plans and Annexes:
Disaster-specific Annex: Widespread Plant or Animal Disease – Widespread plant or animal disease may impact the life and health safety of the human populations which come in contact with diseased plants and animals, which requires the coordination of a variety of ESFs including ESF 8.
Disaster-specific Annex: Nuclear Attack (Military) – In a nuclear attack, a large number of people will require medical assistance due to radiological exposure, burns, blindness, and a wide variety of other injuries. These health and medical needs, provided by ESF 8, will be coordinated in close conjunction with ESF 10 for the management of the radiological contamination and concerns.
Disaster-specific Annex: CBRNE Attack (Terrorist) – In terrorist attacks which concern chemical, biological, radiological, nuclear, or explosive components, the targets are often people, leading to many injuries and fatalities. ESF 8 will likely be highly impacted through the response and recovery phase of a terrorist incident.
Disaster-specific Annex: Extreme Temperatures – Although extreme temperatures do not directly impact ESF 8, often extreme temperatures can put vulnerable populations in danger of medical complications, which requires the coordination of ESF 8 and ESF 5 to ensure that vulnerable populations are addressed through the extreme temperature incident.
Disaster-specific Annex: Public Health Emergencies – As the lead ESF for health and medical incidents, ESF 8 is intrinsically involved in public health emergencies and will often lead the response and recovery to these types of incidents.

Other Areas of Interest:
Some subjects of interest related to this subject include vector control, toxic substances, special pathogens, additional laboratory capabilities, and water and sanitation systems.

A Public Health Emergency is declared by the CDC, the President, and the Secretary of the Department of Health and Human Services, however an emergency about public health can be declared at the state level.

Some special teams may be called, including the Michigan Mortuary Response Team (MI MORT) which may be called in any incident, with or without a disaster declaration; and the Disaster Assistance Recovery Team (DART) which supports the other first responders in a disaster recovery.

Tasks: Lead Agency
Michigan Department of Health and Human Services - Health
The MDHHS coordinates overall disaster medical responses in the State of Michigan.

1. Coordinate with the CDC and private sector partners to monitor blood, blood products, and tissue supplies, shortages and reserves, with special considerations for acute needs in planned events. (Prevent)
2. Conduct epidemiological surveillance and investigation. (Prevent)
    a. Michigan Disease Surveillance System (MDSS).
    b. Emergency Department Syndromic Surveillance System (MSSS).
    c. Early Warning Infectious Disease Surveillance (EWIDS).
3. Maintain disaster behavioral health plan in conjunction with Community Mental Health Service Programs. (Protect)
4. Coordinate with the US DHHS on notification or response to foreign country potential health threats. (Protect)
5. Maintain the Responder Safety and Health Plan. (Protect)
6. Maintain plans included for chemical plans and nuclear response. (Protect)
7. Provide nutrition assistance in coordination with the MDE and MDARD. (Protect)
8. Protect patients, staff, and visitors in state mental health facilities in conjunction with ESF 13. (Protect)
9. Protect patients, staff, and visitors in state training and rehabilitation facilities in conjunction with ESF 13. (Protect)
10. Maintain primary responsibility for the situational awareness of public health, medical, mental, and behavioral health assistance; and determining the appropriate level of response capability based on the requirement contained in the action request form and developing status updates and assessments. (Respond)
11. Assume operational control of public health and medical response assets in a state of emergency, in the event of an incident threatening public health. Members of the MDMVA remain under the authority and control of the MDMVA. (Respond)
12. Lead the state effort to provide public health and medical assistance to the affected area in an incident requiring a coordinated state response. (Respond)
13. Request ESF 8 partners to activate and deploy health professionals, pharmacists, and medical countermeasures in response to requests for state assistance, as appropriate. (Respond)
14. In cooperation with local, tribal, state, and private partners, conduct and monitor health surveillance, which include assessing morbidity, mortality, community needs, and indicators related to an ongoing incident. (Respond)
15. Distribute KI to radiologically impacted survivors. (Respond)

16. Coordinate public health and medical support and patient movement requirements with supporting departments, agencies, and governments throughout the incident. (Respond)
17. Provide public health risk communication messages and advisories that communicate relevant information on health hazards or other situations that could potentially threaten the public in multiple and accessible formats (e.g. visual public announcements, interpreters, etc.) and in a culturally and linguistically appropriate manner. (Coordinates with ESF 15). (Respond)
18. Disseminate public health information on protective actions related to exposure to health threats or environmental threats. (Coordinates with ESF 15). (Respond)
19. Provide support for public health matters for radiological incidents as a member of the Health Advisory Team for Environment, Food, and Health. (Coordinates with ESF 10 for radiological incidents). (Respond)
20. Alert MDHHS Disaster Medical System and provide specific reporting instructions to support incident relief efforts. (Respond)
21. Alert and activate National Disaster Medical System (NDMS) patient reception plans in a phased, regional approach, and when appropriate, in a statewide approach, as determined by MDHHS. (Respond)
22. Provide medical regulation, reception, tracking, and management of patients transported through the MDMVA. (Respond)
23. Provide medical regulation, reception, tracking, and management of patients received at MDHHS Emergency Coordination Center(s) (ECCs) and transported to nearby available hospitals. (Respond)
24. Provide epidemiological and occupational health support, telemedicine, and other specialized medical support. (Respond)
25. Assist local, state, and tribal officials in the provision of emergency medical, surgical, medical, and behavioral healthcare, including Critical Incident Stress Management (CISM). (Respond)
26. Provide support with the National Ambulance Contract for evacuating patients who are too seriously ill or otherwise incapable of being evacuated in general evacuation conveyances. (Respond)
27. Provide security for the SNS and secure movement of inbound medical equipment, supplies, blood, and tissues. (Respond)
28. Provide quarantine technical assistance at request of facility. (Respond)
29. Issue quarantines when necessary. (Respond)
30. Work with local agencies to establish an adult missing person call-center and assist in the disposition of cases, when requested. (Respond)
31. Provide personnel and management support related to worker safety and health in field operations during ESF 8 deployments. (Respond)
32. Coordinate with participating hospitals to provide incident-related medical care to authorized disaster medical system beneficiaries affected by a major disaster or emergency. (Respond)
33. Furnish available VA hospital care and medical services to individuals responding to, involved in, or otherwise affected by a major disaster or emergency, including members of the Armed Forces on active duty. (Respond)
34. Provide environmental technical assistance (e.g., environmental monitoring) and information in the event temporary interment is necessary and/or human remains are contaminated. (Respond)
35. Monitor and report damage and impacts to critical private sector facilities, infrastructure, and systems through and with the Regional Healthcare Coalitions, Tribal HD, Health Departments, and other partners. (Respond)
36. Coordinate the investigation, and coordinate the intervention of, communicable disease. (Respond)
37. Coordinate the allocation of medical countermeasures essential to public health, including but not limited to equipment and airway supplies: (Respond)
    a. Michigan Emergency Preparedness Pharmaceutical Plan (MEPPP).
        i. Michigan Emergency Drug Delivery and Resource Network (MEDDRUN).
        ii. CHEMPACK.
        iii. Mass causality trailers.
        iv. Strategic National Stockpile (SNS).
        v. Potassium Iodide (KI) Distribution.
38. Issue health advisories, standing orders and protective action guides to the public following the Public Health Code (isolation, quarantine, restrict public gatherings) (Respond)
39. Coordinate mental and behavioral health needs assessment. (Respond)
40. Coordinate crisis counseling services with Community Mental Health Services Programs. (Respond)
41. Support fatality management through the deployment of various teams: (Respond)
    a. Michigan Mortuary Response Team (MI MORT).
    b. Disaster Assistance Recovery Team (DART).
    c. Victim Ante-Mortem Data Collection Team.
    d. Disaster Portable Morgue Unit.
42. Coordinate participation on damage assessment teams – physical and mental and behavioral health of affected residents and first responders. (Respond)
43. Coordinate victim identification services. (Respond)

44. Provide liaison to federal emergency health and medical programs and services (including mental and behavioral health). (Respond)
45. Coordinate with the National Disaster Medical System (NDMS) (Respond)
    a. Disaster Medical Assistance Teams.
    b. Disaster Mortuary Operational Response Teams.
46. Provide technical assistance in the coordination of public health and medical services. (Respond)
47. Utilize the Regional Epidemiologist NetworkConduct public health laboratory testing systems. Involved laboratory and epidemiological capabilities are conducted by: (Respond)
    a. StarLims (laboratory surveillance).
    b. BioWatch.
    c. Lab response plan.
    d. US Postal Service Biohazard Detection System (BDS), which is a coordination with the federal DHS and local health department.
48. Coordinate the state public health communication response with ESF 15. (Respond)
49. Maintain the tactical communication capability for emergencies impacting public health. (Respond)
50. Coordinate medical surge for mass casualty care in coordination with health care coalitions involved (EMS and hospitals input situational information). (Respond)
    a. EMResource – used to track patients.
    b. Mass Casualty Care plan maintenance.
    c. Maintain the Michigan Transportable Emergency Surge Assistance (MI-TESA).
    d. Maintain the mass Casualty Response Plan.
    e. Maintain the Pediatric Surge Plan.
    f. Maintain the Burn Surge Plan.
51. Facilitate the deployment of volunteer health professionals for emergency response utilizing plans associated with the MI Volunteer Registry. (Respond)
52. Coordinate complete food, water, and environmental testing in a lab, in coordination with MDARD, EGLE, and federal partners. (Respond)
    a. Health departments respond in shelters through food testing, in coordination with MDARD and local health departments.
53. Provide surge capacity of laboratory and diagnostic support. (Respond)
54. Assist and support local and tribal area officials in monitoring vital records and surveillance systems, including but not limited tracking survivors impacted by toxic, radiological, or otherwise harmful substances including lead. (Recover)
55. Coordinate with MI MORT to provide available assistance for human fatality management services including remains collection, remains transport, mortuary services, victim identification, autopsy and consultation and general assistance with temporary interment sites. Provide technical consultation for chemically or radiologically contaminated or infectious remains. Provide support to Victim Information Centers. Track decedents transported to fatality management facilities (e.g., mortuary, crematorium, funeral home). (Recover)
56. Provide location of human remains to facilitate humane recovery and collection of available forensic/ante-mortem data during course of Search and Rescue (SAR) operations in conjunction with MI MORT. (Recover)
57. Provide local, and tribal officials with legal advice concerning identification of the deceased consistent with cultural sensitivity practices. (Recover)
58. Possess statutory authority to take specific actions to prepare for, respond to, and recover from public health and medical emergencies. (All)
59. Consult public health and medical subject matter experts with ESF 8 supporting organizations. This includes partners representing all populations such as individuals with access and functional needs, which can include pediatric populations, individuals with disabilities, older adults, and individuals with temporary or chronic medical conditions. (All)
60. In cooperation with EGLE, provide advice and assistance to hospitals with radiation detection equipment.
61. Maintain the Michigan Health Alert Network (MIHAN) – See ESF 2. (All)
62. Collaborate with MDARD, EGLE, and MDNR to deliver effective “one health” response that integrates human, animal, plant, and environmental health. (All)
63. Conduct public health laboratory testing. (All)

Tasks: State Government Support Agencies

Michigan Department of Agriculture and Rural Development (MDARD)

1. Provide secondary support nutrition assistance for MDHHS – Human Services and MDE. (Protect)
2. Ensure the safety and defense of the Nation’s supply of meat, poultry, and processed egg products in coordination with the USDA Food Safety Inspection Service (FSIS). (Protect)
3. Assure the safety, defense, and security of food in coordination with other responsible state and federal agencies (e.g., USDA and FDA). In cooperation with local, tribal, territorial, and insular area officials, Assess whether food

manufacturing, food processing, food distribution, food service, and food retail establishments in the affected area may provide safe food. (Protect)

4. Provide secondary technical assistance and environmental information for the assessment of the public health aspects of situations involving agricultural hazardous materials such as pesticides and fertilizers, including technical and policy assistance. (Protect)
5. May coordinate with veterinarians to offer immunizations for vaccination campaigns as needed. (Mitigate)
6. Cooperate with local and tribal officials as well as the food industry to conduct trace backs and/or recalls of adulterated products. (Respond)
7. Cooperate with local, state, and tribal, and Federal officials to provide guidance regarding the proper disposal of contaminated products and the decontamination of affected food facilities to protect public health. (Respond)
8. Issue health advisories, standing orders, and protective action guides to the public (in coordination with ESF 15). (Respond)
9. Disseminate public health information on protective actions related to exposure to health threats or environmental threats (in cooperation with ESF 15). (Respond)
10. Respond to animal and agricultural health and disease management issues. (Respond)
11. Support public health matters for radiological incidents as a member of the Advisory Team for Environment, Food, and Health; and by providing assets to the FRMAC under ESF 10 and to the Advisory Team for Environment, Food, and Health. (Respond)
12. Provide technical expertise in support of animal and agricultural emergency management. (Respond)
13. Issue agricultural advisories including embargoes, animal quarantines, and animal destruction orders. (Respond)
14. Respond to animal and agricultural health and disease management issues. (Respond)
15. Assign MDARD personnel to address veterinary needs. (All)
16. Ensure the safety and defense of the food and agricultural sector. (All)
17. Collaborate with MDHHS - Health to deliver effective “one health” response that integrates human, animal, plant, and environmental health. (All)

Department of Attorney General (MDAG)

1. Provide guidance, promulgate regulations, conduct investigations and compliance reviews, and enforce Federal and state civil rights laws, including their application to emergency management. (Prevent)
2. Provide public health risk communication messages and advisories that communicate relevant information on health hazards or other situations that could potentially threaten the public in multiple and accessible formats (e.g. visual public announcements, interpreters, etc.) and in a culturally and linguistically appropriate manner. (Respond)

Department of Civil Rights (MDCR)

1. Provide guidance, conduct investigations and compliance reviews of civil rights and laws, including their application to emergency management. (All)
2. Provide guidance, conduct investigations and compliance reviews, and enforce Federal and state civil rights laws, including their application to emergency management. (All)
3. Monitor and advocate for the recovery needs of individuals with disabilities. (All)

Department of Education (MDE)

1. Provide nutrition assistance in coordination with the MDHHS – Human Services and MDARD. (Protect)
2. Protect residents, staff, and visitors at the Michigan School for the Deaf. (Respond)
3. Assure the safety, defense, and security of food in coordination with other responsible state and federal agencies (e.g., USDA). In cooperation with local, tribal, territorial, and insular area officials, assess whether food manufacturing, food processing, food distribution, food service, and food retail establishments in the affected area are able to provide safe food. (All)
4. Provide contract support for temporary storage capability of human remains in a catastrophic fatality incident, such as refrigerated trucks, trailers, or rail cars. (All)

Department of Environment, Great Lakes, and Energy (EGLE)

1. Assist in identifying alternate water supplies and wastewater collection and treatment for critical healthcare facilities. (Prevent)
2. Provide, in cooperation with other state and local agencies, personnel and equipment, including portal monitors to support initial screening; and provide advice and assistance to local, state, and tribal personnel conducting screening/decontamination of persons leaving a contaminated zone. (Respond)
3. Provide limited assistance in the decontamination of victims. (Respond)
4. Assist local, state, and tribal officials in the monitoring and surveillance of the incident area. (Respond)
5. Provide medical advice, specialized training, and on-site assistance for the treatment of all types of radiation exposure accidents. (Respond)

6. Provide situational awareness, cross-sector coordination, and prioritized recommendations regarding critical infrastructure and key resources. (Respond)
7. Provide for post-exposure evaluation of radiation dose received. (Respond)
8. Assist local, and tribal officials in establishing a registry of individuals potentially exposed to radiation in a radiological/nuclear incident; performing dose reconstruction; and conducting long-term monitoring of this population for potential long-term health effects. (Recover)
9. Assist public health and medical authorities in determining radiological dose information; Assist in providing coordinated gathering of environmental radiological information and data; Assist with consolidated data sample analyses, evaluations, assessments, and interpretations; and provide technical information. (Recover)
10. Assist and support local, and tribal officials in monitoring for internal patient radiological contamination (through coordinated patient record with MDHHS) and administering pharmaceuticals (KI provided by MDHHS) for internal decontamination. (Recover)
11. Assist local, and tribal officials in establishing a registry of individuals potentially exposed to radiation in a radiological/nuclear incident, or those impacted by toxic or otherwise harmful substances. Perform dose reconstruction and conducting long-term monitoring of this population for potential long-term health effects. (Recover)
12. Provide regional resources (e.g., personnel, specialized equipment, and supplies) to evaluate, control, and mitigate radiological hazards to workers and the public. (All)
13. Collaborate with MDHHS- Health to deliver effective "one health" response that integrates human, animal, plant, and environmental health. (All)
14. Provide technical assistance and environmental information for the assessment of the public health aspects of situations involving hazardous materials, including technical and policy assistance with regards to water and wastewater systems. (All)

Department of Labor and Economic Opportunity (LEO)

1. Protect residents, staff, and visitors at the Michigan Career and Technical Institute and Bureau of Services for Blind Persons (BSBP) Training Center. (Respond)
2. Provide vocational rehabilitation services in recovery. (Recover)
3. Provide independent living services through direct services and collaboration with the Centers for Independent Living and other community organizations to protect home bound and elderly. (All)

LEO - Michigan Community Service Commission (MCSC)

1. Support local adult missing person call-centers and assist in the disposition of cases, as needed. (Respond)

LEO - Michigan Occupational Safety & Health Administration (MIOSHA)

1. MIOSHA will provide support for the four phases (planning, mitigation, response, and recovery) of emergency management. Planning and mitigation will be supported through coordination and outreach. Where needed and as applicable and appropriate, MIOSHA will support emergency response and recovery operations as outlined below:
    a. Conduct hazard analyses.
    b. Recommend hazard controls and safe work practices.
    c. Provide expertise in safety and health risk assessment.
    d. Offer technical assistance and consultation.
    e. Provide guidance on selection and use of PPE, including respirator fit testing.
    f. Conduct on-site safety surveys and conduct atmospheric monitoring where it can be accomplished without risk to MIOSHA personnel.
    g. Answer questions related to MIOSHA regulations.
    h. Assist in the development of site health and safety plans.
    i. Collect and assemble safety and health data related to the incident.
2. Provide pertinent information and literature on applicable safety and health guidelines. Note: OSHA and other OSHA State Plan staff will always distribute pertinent OSHA Guidelines during their emergency response.
3. MIOSHA's primary role in the Incident Command System (ICS) will be to assist the "Safety Officer". MIOSHA should not assume responsibility of the site Safety Officer. Resources may also be assigned to the Planning Section and Operations Section to assure that information needed for hazard analysis and risk assessment is communicated to the site Safety Officer.
4. Activation of the MIOSHA team will occur in response to a declaration of emergency by the Governor and communicated through the Emergency Management Division of the Michigan State Police Department, or as directed by the Director or designee of LEO. On a case-by-case basis, the Director or designee of LEO, such as the Emergency Management Coordinator or the MIOSHA Director, can also activate the MIOSHA team in response to requests from local, state, or federal governmental agencies. However, the incident should be large-

scale, incident command system based, and multi-jurisdictional. The ICS structure and principles will be applied when the MIOSHA team is responding to any incident.

Department of Licensing and Regulatory Affairs (LARA)

1. Ensure state and federal licensed health care facilities have emergency procedures. (Protect)
2. Monitor and Report damage and impacts to state and federal licensed healthcare facilities and critical private sector facilities, infrastructure, and systems. (All)

LARA -Bureau of Fire Services (BFS)

1. Ensure state and federal licensed health care facilities have emergency procedures. (Protect)
2. Monitor and report damage and impacts to state and federal licensed healthcare facilities and critical private sector facilities, infrastructure, and systems. (Respond)
3. Provide expedited post-disaster licensed facility inspections. (Recover)

Department of Military and Veteran Affairs (DMVA)

1. Provide guidance, promulgates regulations, conduct investigations and compliance reviews, and enforces Federal and state civil rights laws, including their application to emergency management. (Prevent)
2. Protect patients/residents, staff, and visitors at the Jacobetti and Grand Rapids Homes for Veterans. (Protect)
3. Furnish available VA hospital care and medical services to individuals responding to, involved in, or otherwise affected by a major disaster or emergency, including members of the Armed Forces on active duty. (Respond)
4. Provide public health risk communication messages and advisories that communicate relevant information on health hazards or other situations that could potentially threaten the public in multiple and accessible formats (e.g. visual public announcements, interpreters, etc.) and in a culturally and linguistically appropriate manner. (Respond)
5. Consult public health and medical subject matter experts with ESF 8 supporting organizations. This includes partners representing all appropriate populations such as individuals with access and functional needs, which can include pediatric populations, individuals with disabilities, older adults, and individuals with temporary or chronic medical conditions. (Respond)
6. Provide support with the National Ambulance Contract for evacuating patients who are too seriously ill or otherwise incapable of being evacuated in general evacuation conveyances. (Respond)
7. Provide local, tribal, territorial, and insular area officials with legal advice concerning identification of the deceased consistent with cultural sensitivity practices. (Tribal Liaison) (Respond)
8. Monitor and advocate for the recovery needs of individuals with disabilities. (Respond)
9. Provide personnel, equipment, and supplies primarily for communications, aircraft, and base camps for deployed Federal public health and medical teams. (Respond)
10. At the request of MDHHS and in coordination with interagency partners, provide disaster medical system support for aeromedical evacuation and medical management of disaster medical system patients at designated patient collection points to designated patient reception areas. (Respond)
11. Coordinate reception, tracking, and management of patients evacuated on MDMVA assets from the designated patient collection point to the designated patient reception areas, as well as patients received at MDHHS Emergency Coordination Center(s) (ECCs) and transported to nearby hospitals and VA hospitals that are available and can provide appropriate care. Provide medical regulation of patients moved on MDMVA transportation assets. (Respond)
12. Provide available logistical support (e.g., transportation) to public health/medical response operations. (Respond)
13. Deploy available medical, surgical, and behavioral health personnel for casualty clearing and staging, patient management, and treatment. Deploy healthcare providers in a limited capacity to augment civilian hospital staff and Federal deployable teams, and Support points of medical countermeasure distribution. Deploy chemical, biological, radiological, and nuclear (CBRN) medical subject matter experts and/or teams for technical consultation and/or medical support. Mobilize and Deploy available Active Component, Reserve, and/or National Guard medical units or individuals when authorized for public health and medical response. (Respond)
14. Provide deployable units (e.g., Expeditionary Medical Support System, Combat Support Hospitals) and platforms (e.g., U.S Naval hospital ships, and/or other Naval vessels) for patient medical and/or surgical care. (Respond)
15. Provide epidemiological and occupational health support, telemedicine, and other specialized medical support. (Respond)
16. Provide available military medical personnel to assist ESF 8 in the protection of public health (e.g., food, water, hygiene, wastewater removal, solid waste disposal, and vector control). (Respond)
17. Provide available veterinary personnel to assist in the treatment of animals and in food safety, security, and protection activities. Provide available zoonotic and food surveillance data to ESF 8 and ESF 11 partners (e.g., FDA, USDA). (Respond)

18. Provide available MDMVA medical supplies and materiel for use at points of distribution, hospitals, clinics, or medical care locations operated for exposed populations, incident victims, or ill patients. Provide available MDMVA medical supplies and materiel for mass care centers. (Respond)
19. Provide the use of functional MDMVA treatment facilities within or near the incident area for medical care of non-Military Healthcare System beneficiaries. (Respond)
20. Provide available assistance for human fatality management services including remains collection, remains transport, mortuary services, victim identification, autopsy (if appropriate), and consultation and general assistance with temporary interment sites. Provide technical consultation for chemically or radiologically contaminated or infectious remains. Provide support to Victim Information Centers. Tracks decedents transported on MDMVA assets to fatality management facilities (e.g., mortuary, funeral home). (Respond)
21. Provide available blood, blood products, and tissues in coordination with MDHHS. (Respond)
22. Provide public health and medical surveillance, laboratory diagnostics, and confirmatory testing (Respond)
23. Coordinate state assets for external monitoring and decontamination activities for radiological emergencies pursuant to criteria established by the state(s) in conjunction with MDHHS. (Respond)
24. Provide, in cooperation with other state and local agencies, personnel and equipment, including portal monitors to support initial screening; and provide advice and assistance to local, state tribal, territorial, and insular area personnel conducting screening/decontamination of persons leaving a contaminated zone. (Respond)
25. Provide regional resources (e.g., personnel, specialized equipment, and supplies) to evaluate, control, and mitigate radiological hazards to workers and the public. (Respond)
26. Provide limited assistance in the decontamination of victims. (Respond)
27. Assist local, state, tribal, territorial, and insular area officials in the monitoring and surveillance of the incident area. (Respond)
28. Assist public health and medical authorities in determining radiological dose information; Assist in providing coordinated gathering of environmental radiological information and data; Assist with consolidated data sample analyses, evaluations, assessments, and interpretations; and provide technical information. (Respond)
29. Provide location of human remains to facilitate humane recovery and collection of available forensic/ante-mortem data during course of Search and Rescue (SAR) operations. (Respond)
30. Provide logistical support for deploying ESF 8 medical elements required and coordinate the use of mobilization centers/staging areas; transportation of resources; use of disaster fuel contracts; emergency meals; potable water; base camp services; supply and equipment resupply; and use of all national contracts and interagency agreements managed by DTMB for response operations. (Respond)
31. Coordinate with participating hospitals to provide incident-related medical care to authorized National Disaster Medical System (NDMS) (disaster medical system) beneficiaries affected by a major disaster or emergency. (Respond)
32. Furnish available VA hospital care and medical services to individuals responding to, involved in, or otherwise affected by a major disaster or emergency, including members of the Armed Forces on active duty. (Respond)
33. Provide a Medical Emergency Radiological Response Team for technical consultation on the medical management of injuries and illnesses due to exposure to or contamination by ionizing radiation. (Respond)
34. Alert VA ECCs and provide reporting instructions to support incident relief efforts and activate National Disaster Medical System (NDMS) patient reception plans in a phased, regional approach and when appropriate, in a national approach. (Respond)
35. Bury and memorialize eligible veterans and advises on methods for interment of the dead during national or homeland security emergencies. (Recover)

Department of Natural Resources (MDNR)

1. Collaborate with MDHHS-Health to deliver effective “one health” response that integrates human, animal, plant, and environmental health. (Respond)
2. Disseminate public health information on protective actions related to exposure to health threats or environmental threats. (Respond)
3. Assist local, state, tribal, territorial, and insular area officials in the monitoring and surveillance of the incident area. (Respond)

Department of State (MDOS)

1. Coordinate the diplomatic aspects of international activities related to CBRN incidents and events that pose transborder threats as well as the diplomatic aspects of naturally-occurring disease outbreaks with international implications. (Respond)
2. Assist with coordination with foreign states concerning offers of support, gifts, offerings, donations, or other aid. This includes establishing coordination with partner nations to identify the immediate support, validated by the United States, in response to an incident. (Respond)

Michigan State Police (MSP)

1. Provide MDHHS with relevant information of any credible threat or other situation that could potentially threaten public health. This is supported through FBI headquarters. (Prevent)
2. Provide guidance, promulgate regulations, conduct investigations and compliance reviews, and enforce Federal and state civil rights laws, including their application to emergency management. (Prevent)
3. As the Coordinator for ESF 13, provide crowd control at fixed and deployed healthcare facilities for the protection of workers and to address public safety and security. (Protect)
4. Provide security for the SNS and secure movement of inbound medical equipment, supplies, blood, and tissues. (Protect)
5. Provide quarantine assistance. (Respond)
6. Provide logistical support for deploying ESF 8 medical elements required and coordinate the use of mobilization centers/staging areas, transportation of resources, use of disaster fuel contracts, emergency meals, potable water, base camp services, supply and equipment resupply, and use of all national contracts and interagency agreements managed by DTMB for response operations. (Respond)
7. Act with the Federal Bureau of Investigation (FBI) to conduct evidence collection and analysis of all CBRN-related materials and controls potential crime scenes. (Respond)
8. Provide location of human remains to facilitate humane recovery and collection of available forensic/ante-mortem data during course of Search and Rescue (SAR) operations. (Recover)
9. Assist in victim identification. (Recover)
10. Share missing person data with ESF 6, ESF 8, ESF 13, and the American Red Cross in support of identification of the deceased and seriously wounded. (Recover)
11. Support local death scene investigations and evidence recovery. (Recover)
12. Provide critical incident aftermath services for disaster responders – MSP Office of Behavioral Science. (Recover)

MSP - Emergency Management Homeland Security Division (EMHSD)

1. Provide MDHHS with relevant information of any credible threat or other situation that could potentially threaten public health. (Prevent)
2. REP: Provide education and training to evaluate, control, and mitigate radiological hazards to workers and the public. (Prevent)
3. REP: Assist and support local, and tribal officials in monitoring for internal patient radiological contamination and administering pharmaceuticals for internal decontamination. (Protect)
4. REP: Assist local and tribal officials in establishing a registry of individuals potentially exposed to radiation in a radiological/nuclear incident; performing dose reconstruction; and conducting long-term monitoring of this population for potential long-term health effects. (Protect)
5. Assist MDHHS in operational control of state emergency public health and medical response assets, as necessary, in the event of a public health emergency, except for members of the MDMVA, who remain under the authority and control of the MDMVA. (Respond)
6. Support the MDHHS in the state response to interstate and international requests for public health and medical assets and coordinate with state departments/agencies and international partners on the acceptance or provision of international public health and medical assistance. (EMAC/NEMAC). (Respond)
7. Provide technical assistance to the MDHHS in the application for federal crisis counseling. (Respond)
8. Identify and arrange for use of DHS/U.S. Coast Guard (USCG) search and rescue (SAR) aircraft and other assets in providing urgent airlift and other accessible transportation support: (Respond)
9. Provide situational awareness, cross-sector coordination, and prioritized recommendations regarding critical infrastructure and key resources. (Respond)
10. Provide public health risk communication messages and advisories that communicate relevant information on health hazards or other situations that could potentially threaten the public in multiple and accessible formats (e.g. visual public announcements, interpreters, etc.) and in a culturally and linguistically appropriate manner. (Respond)
11. Assist in providing information/liaison with emergency management officials in NDMS FCC areas. (Respond)
12. Request ESF 8 organizations to activate and deploy health professional and veterinary personnel, pharmaceuticals, equipment, and supplies in response to requests for state assistance, as appropriate. (Respond)
13. Coordinate public health and medical support and patient movement requirements with supporting departments, agencies, and governments throughout the incident. (Respond)
14. Maintain situational awareness and the common operating picture via MI CIMS. (Respond)
15. Assist the situational awareness of public health, medical, and behavioral health assistance; determining the appropriate level of response capability; and developing status updates and assessments. (Respond)
16. Below listed are activities the MSP/EMHSD Radiological Emergency Preparedness (REP) program may perform with their expertise. (Respond)

a. Provide support for public health matters for radiological incidents as a member of the Advisory Team for Environment, Food, and Health.
b. Provide, in cooperation with other state and local agencies, personnel and equipment, including portal monitors to support initial screening; and provide advice and assistance to local, state tribal, territorial, and insular area personnel conducting screening/decontamination of persons leaving a contaminated zone.
c. Assist local, state, tribal, territorial, and insular area officials in the monitoring and surveillance of the incident area.
d. Assist public health and medical authorities in determining radiological dose information; assist in providing coordinated gathering of environmental radiological information and data; assist with consolidated data sample analyses, evaluations, assessments, and interpretations; and provide technical information.
e. Coordinate the diplomatic aspects of international activities related to CBRN incidents and events that pose transborder threats as well as the diplomatic aspects of naturally-occurring disease outbreaks with international implications.
f. Provide a Medical Emergency Radiological Response Team for technical consultation on the medical management of injuries and illnesses due to exposure to or contamination by ionizing radiation.
g. Provide support for public health matters for radiological incidents by providing assets to the FRMAC under ESF 10 and to the Advisory Team for Environment, Food, and Health.

Department of Technology, Management, and Budget (DTMB)

1. As requested, through vendor resources, provide security for staff and visitors in state facilities. (Respond)
2. Provide security, through vendor resources, for the SNS and secure movement of inbound medical equipment, supplies, blood, and tissues. (Respond)
3. Collaborate with the MSP/EMHSD, and other transportation-providing agencies to provide technical assistance in identifying and arranging for all types of transportation, such as air, rail, marine, and motor vehicle and accessible transportation. (Respond)
4. At the request of ESF 8, provide technical support to assist in arranging logistical movement support (e.g., supplies, equipment, blood supply) from MDOT resources, subject to MDOT statutory requirements. (Respond)
5. Provide contract support for temporary storage capability of human remains in a catastrophic fatality incident, such as refrigerated trucks, trailers, or rail cars. (Respond)
6. Provide situational awareness, cross-sector coordination, and prioritized recommendations regarding critical infrastructure and key resources through the MPSC. (Respond)
7. Provide available logistical support (e.g., transportation) to public health/medical response operations. (Respond)
8. Provide logistical support for deploying ESF 8 medical elements required and coordinate the use of mobilization centers/staging areas; transportation of resources; use of disaster fuel contracts; emergency meals; potable water; base camp services; supply and equipment resupply; and use of all national contracts and interagency agreements managed by DTMB for response operations. (Respond)
9. Assist with the coordination of assessments, repairs, and restorations of damaged state mental health facilities, as requested. (Recover)
10. Through the Office of the State Employer, provide post-incident counseling assistance to affected state employees. (Recover)

Department of Transportation (MDOT)

1. Collaborate with the EMHSD, and other transportation-providing agencies to provide technical assistance in identifying and arranging for all types of transportation, such as air, rail, marine, and motor vehicle and accessible transportation. (Respond)
2. Coordinate with the Federal Aviation Administration for air traffic control support for priority missions. (Respond)
3. At the request of ESF 8, provide technical support to assist in arranging logistical movement support (e.g., supplies, equipment, blood supply) from DOT resources, subject to DOT statutory requirements. (Respond)

Tasks: Federal Government Support Agencies

United States Army Corp of Engineers (USACE)

1. Through ESF 3, provide technical assistance, equipment, and supplies in support of MDHHS and MDLARA to accomplish temporary restoration of damaged public utilities affecting public health and medical facilities. Through ESF 3, provide power (e.g., generators) to medical and public health facilities. Through ESF 3 and in coordination with state and local officials, provide site evaluation and site (e.g., ground) preparation for temporary interment of human remains. (Respond)

United States Coast Guard (USCG)

1. Coordinate with EMHSD to use the DHS/U.S. Coast Guard (USCG) search and rescue (SAR) aircraft and other assets in providing urgent airlift and other accessible transportation support: (Respond)
    a. Provide medical assistance to extracted victims.
    b. Assist in coordinating with local emergency medical systems for transfer of victims to appropriate healthcare facilities.
    c. Conduct search operations for human remains, as mission assigned.

National Weather Service (NWS)

1. Provide near real-time transport, dispersion, and predictions of atmospheric releases of radioactive and hazardous materials that may be used by authorities in taking protective actions related to sheltering and evacuating affected populations. (Respond)
2. Assist with the Interagency Modeling and Atmospheric Assessment Center (IMAAC) to coordinate, produce, and disseminate dispersion modeling and hazard prediction products that represent the state position during an actual or potential incident to aid emergency responders in protecting the public and environment. (Respond)

United States Department of Justice (DOJ)

1. Act through the Federal Bureau of Investigation (FBI) to conduct evidence collection and analysis of all CBRN-related materials and controls potential crime scenes. (Respond)

Tasks: Nonprofit Organization Partners

American Red Cross (ARC)

1. Provide disaster-related emergency first aid, consisting of basic first-aid and referral to appropriate medical personnel and facilities, and health care of minor illnesses and injuries to incident victims in Red Cross managed shelters, and possibly other sites determined, in consultation with the primary agency. (Respond)
2. Advocate for the replacement of and, where possible, replace medical pharmaceuticals, supplies, and services, including durable medical equipment lost as a result of the disaster. (Respond)
3. Collaborate with MDHHS to deliver effective “one health” response that integrates human, animal, plant, and environmental health. (Respond)
4. Provide blood and blood products when available in accordance with applicable federal and state laws and any pre-existing agreements or contracts. (Respond)
5. Provide for disaster-related health and mental health needs through direct services and/or referrals as necessary. (Respond)
6. Provide disaster-related mortality and morbidity information to requesting agencies, when available. (Respond)
7. Support evacuation through the provision of approved services for accompanying family members/caregivers in coordination with state and tribal officials. (Respond)
8. May provide, when resources allow, appropriately trained and credentialed personnel to assist in temporary infirmaries, immunization clinics, morgues, and field hospitals if requested and available. Assistance could consist of administrative support, logistical support, or health services support within clearly defined boundaries and Red Cross approved scope of practices. (Respond)
9. At the request of MDHHS, coordinate with the American Association of Blood Banks (AABB): Inter-Organizational Task Force on Domestic Disasters and Acts of Terrorism to provide blood and services as needed through regional blood centers. (Respond)
10. Provide disaster-related mental health services for family members of the dead, for the injured, and others affected by the incident. (Recover)
11. Provide information regarding disaster-related mental health surveillance and trends to requesting agencies, when available. (Recover)
12. Support reunification efforts through its reunification services and in coordination with government entities as appropriate. (Recover)

Auxiliary Communications (AUXCOMM)

1. Provide personnel, equipment, and supplies primarily for communications, aircraft, and base camps for deployed Federal public health and medical teams. (Respond)
2. Provide communications support in coordination with ESF 2. (Respond)
3. Provide tactical communications support through Mobile Emergency Response Support, inclusive of all types (i.e., deployable satellite and radio frequency/radio communications). (Respond)

United Way 2-1-1

1. Establish an adult missing person call center and Assist in the disposition of cases. (Respond)

Michigan Voluntary Organizations Active in Disaster (MI VOAD)

2. Provide nutrition assistance. (Respond)

3. Collaborate with MDHHS to deliver effective “one health” response that integrates human, animal, plant, and environmental health. (Respond)
4. Support reunification efforts of government and non-profit agencies. (Respond)
5. Assist in the distribution of medical information to the general public affected by a major disaster or emergency, as needed. (Respond)
6. Provide available personnel to assist in temporary infirmaries, immunization clinics, morgues, hospitals, and nursing homes. Assistance consists of administrative support, logistical support, or health services support within clearly defined boundaries. (Respond)
7. Support evacuation through the provision of services for accompanying family members/caregivers in coordination with local, state, and tribal officials. (Respond)

ESF 9: SEARCH AND RESCUE

Definition/Purpose: The purpose of ESF 9 is to deploy State Search and Rescue (SAR) resources to provide lifesaving assistance to local and tribal authorities, including local SAR Coordinators and Mission Coordinators, when there is an actual or anticipated request for State SAR assistance.

Scope: Activities in this ESF include Structural Collapse Urban Search and Rescue (USAR), maritime/coastal/waterborne SAR, and land SAR. Primary functional responsibilities in ESF 9 include:

- Distress monitoring.
- Incident Communications.
- Locating Distressed personnel.
- Coordinating and executing rescue operations.
- Extrication, evacuation, medical assistance, and civilian services through the use of public and private property.

Core Capabilities: Mass Search and Rescue Operations

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 9 supports multiple Lifelines, however the Lifeline most impacted by ESF 9 is the Safety and Security Lifeline.

Other ESF Overlap:
ESF 13: Public Safety and Security – ESF 13 is closely entwined with ESF 9, especially since both ESFs directly support life safety as a primary function. Often the lead for both ESFs is the same, and often the tasks and activities overlap significantly.

Other Plans and Annexes:
ESF 9 is not directly tied to any Disaster-specific Annexes, however it may be activated for any incident when the need is identified.

Other Areas of Interest:
ESF 9: Search and Rescue operations are facilitated at the local level first and foremost. Locally based operations may include canines from across the state and local manpower; state level assistance may be requested in the form of aviation assets that can assist locals. Generally, SAR operations do not require emergency management response from the state even when State of Michigan assets are utilized.

There are multiple local- and volunteer- based civilian and canine-civilian search groups in the state of Michigan. These groups may not be contacted by the State of Michigan to assist at an incident; however, locals may cooperate with these search groups before reaching out to the SEOC for help. Operations which require SAR capabilities 24/7 are likely to require assistance from partners, other agencies, and outside assets due to the recovery time required for canine SAR units.

Tasks: Lead Agency
Michigan State Police (MSP)

1. Ensure personnel are trained and experienced in maritime/coastal/ waterborne SAR operations and possess specialized expertise, facilities, and equipment for conducting an effective response to distress situations. (Protect)
2. Develop, maintain, and operate rescue facilities (mobile or stationary) for SAR in waters subject to Michigan jurisdiction and is designated the primary agency for maritime/coastal/waterborne SAR (Protect)
3. Render aid to persons and protect and save property at any time and at any place at which MSP facilities and personnel are available and can be effectively utilized. (Protect)
4. Maintain air and marine assets to support SAR transportation operations. (Protect)
5. Serve as the overall primary agency to accomplish the ESF 9 mission during structural collapse SAR operations in incidents requiring a coordinated state response. (Respond)
6. MSP SAR groups provide coordination and logistical support to US&R task forces during emergency operations. They also conduct needs assessments and provide technical advice and assistance to local and tribal government emergency managers. (Respond)
7. Conduct SAR operations for incidents where DHS/USCG is the overall primary agency and follows the SAR response structure. (Respond)
8. Maritime/coastal/waterborne SAR include operations for natural and manmade disasters that primarily require DHS/USCG and MSP air, cutter, boat, and response team operations. The Michigan maritime/coastal/

waterborne SAR response integrates DHS/USCG and MSP resources in support of unified SAR operations conducted per the NSP. (Respond)

9. Rescue and aid persons, as well as protect and save property in order to render aid to distressed persons, vessels, and aircraft on and under the high seas and on waters over which Michigan has jurisdiction. (Respond)
10. Coordinate force protection as requested and approved pursuant to the ESF 13 mission. (Respond)
11. Provide specialized resources to support emergency operations. (Respond)
    a. Canine Unit
        i. Technical expertise in search and rescue site management.
        ii. Tracking dogs for various types of scents; including but not limited to locating missing or lost persons, locating deceased persons, locating cadavers underwater, bomb detection, and more.
    b. Marine Services Team
        i. Underwater search and recovery operations.
        ii. Has sonar and side scan sonar for locating submerged objects and bodies.
        iii. Respond as a rescue unit, limited resources.
        iv. Body recovery.
        v. Radiological detection related to shipping.
    c. Emergency Support Team (EST)
        i. Provide assistance with rescue operations.
        ii. Necessary equipment and training for most types of rescue situations; climbing and rappelling gear and individual communications systems.
        iii. Primary MSP response unit for hostile paramilitary action, hostage negotiations, other high-risk situations.
    d. Aviation Unit
        i. Aircraft transportation can be provided for MSP personnel and other state government officials upon receipt of authorization.
        ii. Collection of aerial imagery (photographs and video) of a disaster area and to monitor vehicle traffic flow in incidents requiring evacuation. This can be done utilizing UAS capabilities
            a. Video downlink capability for incident commander.
        iii. MSP aircraft can assist in search and rescue operations while working in conjunction with MSP and other law enforcement personnel.
        iv. Aircrafts outfitted with Bambii Buckets to drop water on fires.
        v. This unit does not perform air rescue operations.
12. Canines can act as urban search and rescue group (USAR). (Respond)
13. Assist in search and rescue operations using the capabilities listed above as well as the Urban Search and Rescue capabilities: (Respond)
    a. Michigan Task Force 1 can be activated through the MABAS Regional Emergency Dispatch (RED) Center to provide those services anywhere in the state. (No field hospital capabilities for immediate lifesaving basic services, though medication is available).

Tasks: State Government Support Agencies

Department of Health and Human Services (MDHHS) – Health

1. Provide personnel for liaisons and support for medical field operations; medical equipment, supplies, and pharmaceuticals; and veterinary support. (Respond)
2. Support disaster fatality management: Disaster Assistance Recovery Team (DART). (Respond)

Department of Insurance and Financial Services (DIFS)

1. Provide assistance with the development and maintenance of tort liability claims coverage for US&R task force and IST personnel engaged in mobilization, deployment, and field operations.

LEO - Michigan Occupational Safety & Health Administration (MIOSHA)

1. MIOSHA will provide support for the four phases (planning, mitigation, response, and recovery) of emergency management. Planning and mitigation will be supported through coordination and outreach. Where needed and as applicable and appropriate, MIOSHA will support emergency response and recovery operations as outlined below:
    a. Conduct hazard analyses.
    b. Recommend hazard controls and safe work practices.
    c. Provide expertise in safety and health risk assessment.
    d. Offer technical assistance and consultation.
    e. Provide guidance on selection and use of PPE, including respirator fit testing.
    f. Conduct on-site safety surveys and conduct atmospheric monitoring where it can be accomplished without risk to MIOSHA personnel.

    g. Answer questions related to MIOSHA regulations.
    h. Assist in the development of site health and safety plans.
    i. Collect and assemble safety and health data related to the incident.
2. Provide pertinent information and literature on applicable safety and health guidelines. Note: OSHA and other OSHA State Plan staff will always distribute pertinent OSHA Guidelines during their emergency response.
3. MIOSHA's primary role in the Incident Command System (ICS) will be to assist the "Safety Officer". MIOSHA should not assume responsibility of the site Safety Officer. Resources may also be assigned to the Planning Section and Operations Section to assure that information needed for hazard analysis and risk assessment is communicated to the site Safety Officer.
4. Activation of the MIOSHA team will occur in response to a declaration of emergency by the Governor and communicated through the Emergency Management Division of the Michigan State Police Department, or as directed by the Director or designee of LEO. On a case-by-case basis, the Director or designee of LEO, such as the Emergency Management Coordinator or the MIOSHA Director, can also activate the MIOSHA team in response to requests from local, state, or federal governmental agencies. However, the incident should be large-scale, incident command system based, and multi-jurisdictional. The ICS structure and principles will be applied when the MIOSHA team is responding to any incident.

LARA - Bureau of Fire Services (BFS)

1. Develop standby agreements to provide equipment and supplies from the National Interagency Fire Center (NIFC) Cache System at the time of deployment. (Prevent)
2. Develop contingency plans for use of NIFC contract aircraft during incidents. (Prevent)
3. If available, provide equipment and supplies from the NIFC Cache System and use of NIFC contract aircraft. (Respond)

Department of Military and Veteran Affairs (DMVA)

1. Provide DOD policy guidance on the following items: (Prevent)
    a. DOD Support to Civil Search and Rescue (DODI 3003.01): States that DOD shall support domestic civil authorities by providing civil SAR service to the fullest extent practicable on a noninterference basis with primary military duties.
    b. Defense Support of Civil Authorities (DODD 3025.18): Provides guidance on the provision of DOD and designated National Guard capabilities when requested by civil authorities.
2. Conduct the following actions through U.S. Northern Command (USNORTHCOM) and U.S. Pacific Command (USPACOM) when DOD is designated the overall primary agency for incidents: (Respond)
    a. Manage DOD SAR resources in the affected area.
    b. Coordinate the provisioning of additional support assets.
    c. Coordinate with local, state, tribal, territorial, insular area, and Federally designated SAR authorities to integrate Federal SAR resources.
    d. Provide representation, as required, at the NRCC, JFO, and local, state, tribal, territorial, and insular area EOCs.
    e. Provide incident reports, assessments, and situation reports as required.
3. Consider specific actions for operations involving DOD: (Respond)
    a. Coordinate facilities, resources, and special capabilities that conduct and support air, land, and maritime SAR operations according to applicable directives, plans, guidelines, and agreements, when requested by USNORTHCOM and/or USPACOM.
    b. USNORTHCOM and USPACOM provide resources for the organization and coordination of civil SAR services and operations within their assigned SAR regions when requested to assist local, state, tribal, territorial, insular area, and Federal authorities.
    c. If DOD SAR capabilities deploy at the direction of the Air Force Rescue Coordination Center in support of the NSP, and subsequently if the Stafford Act is invoked, those capabilities are administered by the NRF and ESF 9. As soon as practical, a DHS/FEMA or other department/agency mission assignment is submitted to and approved by DOD for those capabilities' continued support.
4. Provide support through the deployment of the 51st Civil Support Team (Respond)
    a. Develop contingency plans for use of NIFC contract aircraft during incidents.
    b. If available, provide equipment and supplies from the NIFC Cache System and use of NIFC contract aircraft.
    c. Provide mobile geospatial intelligence, including technical experts (e.g., imagery analysts and geospatial analysts) and robust communications to support SAR field teams or other DHS/FEMA field teams, as requested by the primary agency.
5. Engineering Support Task Assignments: Search and Rescue (Respond)

Department of Natural Resources (MDNR)

1. Request equipment and supplies from the National Interagency Fire Center (NIFC) Cache System as needed. (Prevent)
2. Perform acts necessary to rescue and aid persons, as well as protect and save property in order to render aid to distressed persons, vessels, and aircraft on waters over which Michigan has jurisdiction. (Respond)
3. Render aid to persons and protect and save property imperiled by flood and may also render aid to persons and protect and save property at any time and at any place at which MDNR facilities and personnel are available and can be effectively utilized. (Respond)
4. Share responsibility with the MSP as the overall primary agency for a particular incident to accomplish the ESF 9 mission during land SAR operations in incidents requiring a coordinated state response. (Respond)
5. Provide emergency rescue, firefighting, and cooperative assistance to public safety agencies for related purposes. (Respond)
6. Personnel are trained and experienced in maritime/coastal/waterborne SAR operations and possess specialized expertise and equipment for conducting an effective response to distress situations. (All)
7. Possess SAR resources that are specially trained to operate in various roles, including ground search, small boat operations, swift water rescue, and other technical rescue disciplines. (All)
8. Provide representation, as required, at the and local, state, tribal, territorial, and insular area EOCs. (All)
9. Provide personnel with appropriate technical disciplines and specialized technology to support geospatial analysis and mapping products in support of ESF 9 primary agencies. (All)

MSP - Emergency Management Homeland Security Division (EMHSD)

1. Conduct the following actions: (Respond)
    a. Provide direction control to US&R task force and Incident Support Team (IST) deployments in the affected area. (OSC)
    b. Coordinate with local, tribal, territorial, and insular area designated SAR authorities to integrate state and federal SAR resources.
2. Provide services through the use of the Geographic Information System (GIS). (Respond)
    a. Coordinate and manage the timely tasking, acquisition, analysis, and delivery of satellite imagery or imagery-derived products as directed by the primary agency.
    b. Provide expert analysis of imagery to determine damage levels and other elements of essential information as needed.
    c. Provide mobile geospatial intelligence, including technical experts (e.g., imagery analysts and geospatial analysts) and robust communications to support SAR field teams or other DHS/FEMA field teams, as requested by the primary agency.
    d. Provide imagery-derived and geospatial intelligence analysis in preparation for potential disasters or emergencies.
    e. Provide personnel with appropriate technical disciplines and specialized technology to support geospatial analysis and mapping products in support of ESF 9 primary agencies.

Michigan Civil Service Commission (MiCSC)

1. The Mine Safety and Health Administration provides mine rescue teams, mobile command centers, seismic location systems, TV probe systems, gas sampling analysis, and robot explorers. (Respond)
2. The Department of Labor Office of Workers' Compensation Programs, through its Federal Employees' Compensation Program, provides workers compensation guidance, claims resolution, and coverage for US&R task force and IST personnel while they are engaged in mobilization, deployment, and field operations. (Recover)

Department of Transportation (MDOT)

1. Support the FAA in managing the National Airspace System (NAS), which includes operating a safe, secure, and efficient air traffic system; oversight and certification of aircraft and airmen; regulation of airspace; promotion of air commerce; and the support of America's national defense (49 U.S.C.). (Respond)
2. Support activities to protect and recover NAS operations. (Respond)

Tasks: Federal Government Support Agencies

United States Army Corp of Engineers (USACE)

1. Develop doctrine, training programs, and national standards for structural collapse response operations; conduct initial training courses, advanced coursework, exercises and continuing education for all DHS/FEMA US&R Structures Specialists, and other organizations requiring this capability. (Prevent)
2. Maintain specialized, pre-positioned, deployable equipment caches to support US&R/Disaster Response operations. (Prevent)
3. Deploy specially trained and equipped structural engineers to augment DHS/FEMA US&R task forces, ISTs, military technical rescue organizations, and general-purpose troops during structural collapse incidents and other disaster response missions. (Respond)

4. Provide technical support for rescue engineering capability and advises task force leaders and commanders to assess damage, mitigate hazards, enable safe entry, and assure mobility throughout a disaster site to enable rescue and lifesaving operations. (Respond)

United States Coast Guard (USCG)

1. Coordinate maintenance of Border Patrol Search, Trauma, and Rescue (BORSTAR) teams with the CBP, which are highly specialized units capable of responding to emergency SAR situations anywhere in the United Sates. (Protect)
2. Serve as the overall primary agency to accomplish the ESF 9 mission during maritime/coastal/waterborne SAR operations in coordination with MSP in incidents requiring a coordinated state response. (Respond)
3. Conduct SAR operations for incidents where DHS/USCG is the overall primary agency and follows the SAR response structure as outlined in the NSP, NSS, CISAR Addendum, USCG SAR Addendum, and other DHS/USCG directives. (Respond)
4. Perform any and all acts necessary to rescue and aid persons, as well as protect and save property in order to render aid to distressed persons, vessels, and aircraft on and under the high seas and on waters over which the United States has jurisdiction per 14 U.S.C. 88. (Respond)
5. Perform any and all acts necessary to render aid to persons and protect and save property imperiled by flood, and may also render aid to persons and protect and save property at any time and at any place at which Coast Guard facilities and personnel are available and can be effectively utilized per 14 U.S.C. 88. (Respond)
6. Conduct the following actions when USCG is designated the overall primary agency for incidents: (Respond)
    a. Manage DHS/USCG SAR resources in the affected area.
    b. Coordinate the provisioning of additional support assets.
    c. Coordinate with local, state, tribal, territorial, insular area, and Federally designated SAR authorities to integrate Federal SAR resources.
    d. Provide representation, as required, at the NRCC, JFO, and local, state, tribal, territorial, and insular area EOCs.
    e. Provide incident reports, assessments, and situation reports as required.
7. Use staffing at Area, District, and local Sector Command Centers Promote interagency coordination with local, state, tribal, territorial, and insular area emergency managers during incidents requiring a unified SAR response in which maritime/coastal/waterborne SAR resources allocation are required. (Respond)
8. Serve as the overall primary agency to accomplish the ESF 9 mission during maritime/coastal/waterborne SAR operations in incidents requiring a coordinated Federal response. (Respond)
9. Maritime/coastal/waterborne SAR includes operations for natural and manmade disasters that primarily require DHS/USCG air, cutter, boat, and response team operations. The Federal maritime/coastal/ waterborne SAR response integrates DHS/USCG resources in support of unified SAR operations conducted per the NSP. (Respond)
10. Personnel are trained and experienced in maritime/coastal/ waterborne SAR operations and possess specialized expertise, facilities, and equipment for conducting an effective response to distress situations. (Respond)
11. Develop, maintain, and operate rescue facilities for SAR in waters subject to U.S. jurisdiction and is designated the primary agency for maritime/coastal/waterborne SAR under ESF 9. (Respond)
12. Develop, establish, maintain, and operate rescue facilities under and over the high seas and waters subject to the jurisdiction of the United States consistent with 14 U.S.C. 2. (Respond)

National Weather Service (NWS)

1. Acquire and disseminate weather data, forecasts, and emergency information. (Respond)
2. Provide weather information essential for efficient SAR. (Respond)
3. Predict pollutant movement and dispersion over time (marine and atmospheric). (Respond)
4. Assess areas of greatest hazard following a marine or atmospheric release. (Respond)
5. Provide satellite services for detecting and locating persons in potential or actual distress in the wilderness, maritime, and aeronautical environments. (Respond)

U.S. Customs and Border Protection (CBP)

1. Maintain Border Patrol Search, Trauma, and Rescue (BORSTAR) teams, which are highly specialized units capable of responding to emergency SAR situations anywhere in the United States. (Respond)
2. Maintain air and marine assets to support SAR transportation operations. (Respond)
3. Manage DHS/CBP SAR resources in the affected area. (Respond)
4. Coordinate the provisioning of additional support assets. (Respond)
5. Coordinate with local, state, tribal, territorial, insular area, and Federally designated SAR authorities to integrate Federal SAR resources. (Respond)
6. Provide representation, as required, at the NRCC, JFO, and local, state, tribal, territorial, and insular area EOCs. (Respond)

7. Provide incident reports, assessments, and situation reports as required. (Respond)

Federal Aviation Administration (FAA)

1. Assume sole authority to manage the National Airspace System (NAS), which includes operating a safe, secure, and efficient air traffic system; oversight and certification of aircraft and airmen; regulation of airspace; promotion of air commerce; and the support of America's national defense (49 U.S.C.). (Respond)
2. Support activities to protect and recover NAS operations.

Tasks: Nonprofit Organization Partners

Auxiliary Communications (AUXCOMM)

1. Provide mobile geospatial intelligence, including technical experts (e.g., imagery analysts and geospatial analysts) and robust communications to support SAR field teams or other DHS/FEMA field teams, as requested by the primary agency. (Respond)

ESF 10: OIL AND HAZARDOUS MATERIALS

Definition/Purpose: The purpose of ESF 10 is to provide state support in response to an actual or potential discharge and/or release of oil or hazardous materials when activated.

Scope: Activities in this ESF prepare and respond to public health, welfare, or environmental threat caused by actual or potential oil and hazardous materials incidents. (Hazardous materials may be chemical, biological, radiological, or nuclear substances). Primary functional responsibilities in ESF 10 include:

- Detecting and assessing efforts for environmental contaminations.
- Performing activities to stabilize releases and prevent spread of contamination.
- Performing activities to prevent, minimize, or mitigate a release.
- Analyzing environmental cleanup and waste disposition options, including disposal of contaminated debris.
- Implementing environmental cleanup efforts, including but not limited to;
    - Removing contaminated soil,
    - Decontaminating buildings and structures,
    - Collecting household hazardous waste
    - Collecting abandoned oil and hazardous materials containers,
    - Disposing of animal carcasses contaminated by oil or hazardous materials,
    - Storing, treating, and disposing of oil and hazardous materials, including contaminated debris,
    - Protecting natural resources, and
    - Monitoring debris disposal.

Core Capabilities: Environmental Response/ Health and Safety; Critical Transportation; Infrastructure Systems; Public Information and Warning

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 10 supports multiple Lifelines, however the Lifeline most impacted by ESF 10 is the Hazardous Materials Lifeline.

Other ESF Overlap:
ESF 3: Public Works and Engineering – Debris management is a function of ESF 3: Public Works and Engineering; however, in incidents with contaminated debris, ESF 10: Oil and Hazardous Materials must coordinate closely with ESF 3, which will continue to do initial emergency debris route clearance, stabilization of contaminated structures, and demolition of contaminated structures. ESF 10 conducts the debris and environmental cleanup activities for the remaining contaminated debris.
ESF 12: Energy – In incidents which include materials used in or at nuclear power plants, or oil and other forms of energy, coordination between ESF 12: Energy, and ESF 10: Oil and Hazardous Materials is necessary to ensure the impacted energy infrastructure remains operational while also responding to and addressing the environmental impacts. Further, in nuclear or radiological incidents which require a federal response, the Federal Radiological Monitoring and Assessment Center (FRMAC) may be involved, which is provided by the Department of Energy (DOE) which is operated by ESF 12.

Other Plans and Annexes:
Disaster-specific Annex: Hazardous Materials Incidents – ESF 10 is almost always involved in the response and recovery of hazardous materials incidents and provides subject matter expertise, environment cleanup, and disposal of hazardous wastes of various varieties.
Disaster-specific Annex: Nuclear Power Plant Incidents – Nuclear power plants create hazardous waste, including nuclear waste. A nuclear power plant incident is likely to require coordination with ESF 10 for hazardous waste disposal and nuclear radiation decontamination.
Disaster-specific Annex: Oil and Gas Well/Pipeline Incidents – Oil and gas are both hazardous materials that can contaminate the environment and pose a health and wellness risks, which requires the coordination with ESF 10.
Disaster-specific Annex: Nuclear Attack (Military) – Similar to a nuclear power plant incident, a nuclear attack of military origin will require ESF 10 coordination for decontamination of the affected area.
Disaster-specific Annex: Chemical, Biological, Nuclear, or Explosive Attack (Terrorism) – Chemical, biological, nuclear, and explosive waste can be or produce hazardous materials which requires coordination with ESF 10 to ensure proper disposal.
The National Oil and Hazardous substances Pollution Contingency Plan (NCP) - established framework for how federal environmental response agencies are to coordinate planning and response activities for releases to the environment. The NCP established the National Response Team (NRT), and the Regional Response Team (RRT) which Michigan is part of the Region V, RRT. ESF 10's primary functions are derived from the NCP and Michigan relies on federal agency support as defined in the NCP to help accomplish missions and emergency response during disasters and releases.

Other Areas of Interest:
Oil and hazardous material spills of national significance require a coordinated response between federal, state, local, and tribal territories. Further, nuclear and radiological incidents of any size require coordination with federal partners. Due to this, ESF 10 is closely linked with federal partners in various ways.

State groups of interest:

- Radiological Emergency Response Team (RERT) – A team maintained by EGLE and comprised of state agency staff who have received specific training for completing detection, decontamination, and analysis tasks associated with radiological release.
- Shoreline Cleanup Assessment Team – EGLE and MDNR jointly coordinating response to support EPA, USCG, US FWS, and DOI led teams that clean waterborne oil and hazardous materials spills which impact shorelines are cleaned appropriately.

Some federal partners of interest may include:

- The US Department of Transpiration (US DOT): Pipeline and Hazardous Materials Safety administration (PHSMA).
- The Department of Energy (DOE): Federal Radiological Monitoring and Assessment Center (FRMAC).
- Nuclear Regulatory Commission (NRC).
- Environmental Protection Agency (EPA).
- United States Coast Guard (USCG).
- United States Pipeline and Hazardous Materials Safety Administration (PHMSA).

Tasks: Lead Agency
Department of Environment, Great Lakes and Energy (EGLE)

1. Conduct routine inspections of chemical facilities. (Involved divisions include: the Remediation and Redevelopment Division-RRD, and the Air Quality, Materials Management Division). (Prevent)
2. Coordinate hazardous material safety programs. (Prevent)
3. Work in cooperation with MDARD to ensure the proper disposal of contaminated food or animal feed.
4. Regulate activity on oil and mineral sites. (Prevent)
5. Assist high risk chemical facilities remain compliant with EPA inspections. (Prevent)
6. Utilize air monitoring equipment, mobile and stationary, for atmospheric contamination monitoring and assessment (See ESF 8 – BioWatch). (Prevent)
7. Maintain access to a database of sites with hazardous materials. (Protect)
8. Provide detailed knowledge of hazardous material sites as a result of site visits and vulnerability assessments. (Protect)
9. Assist in the reduction of vulnerabilities and risks associated with certain hazardous material sites. (Protect)
10. Coordinate petroleum and natural gas gathering line pipeline safety activities, in coordination with the Pipeline and Hazardous Materials Safety administration (PHSMA) of the USDOT. (See ESF 3) (Protect)
11. Monitor and regulate subsidence threats caused by mining activity in the Oil, Gas, Minerals Division (OGMD). (Mitigate)
12. Facilitate resolution of conflicting demands for oil and hazardous materials response resources and ensures coordination between the Regional Response Team (RRT), and Unified Coordination activities, as appropriate. (Respond)
13. Provide technical, coordination, and administrative support, and provide personnel, facilities, and communications for ESF 10. (Respond)
14. Manage special teams, including the Radiological Emergency Response Team, which provide specialized technical advice and assistance to responders. (Respond)
15. Provide expertise and assistance for waste management (See ESF 3) from oil discharges and hazardous materials releases, including: (Respond)
    a. Reviewing waste management plans and proposed waste management facilities and temporary storage and staging sites.
    b. Conducting independent sampling and analysis of waste streams.
    c. Monitoring or visiting waste management facilities and temporary storage and staging sites.
    d. Reporting and posting waste sampling results on an appropriate incident website.
16. Support the FRMAC, when activated, with personnel and equipment. (Respond)
17. Maintain close coordination, as appropriate, between EPA, DHS/USCG, the National Response Coordination Center (NRCC), other ESFs and Support Annexes, and the Regional Response Team (RRT). (Respond)

18. Produce and disseminate atmospheric dispersion modeling and hazard prediction products that represent the state position during an actual or potential incident to aid emergency responders in protecting the public and environment. (Respond)
19. Review and monitor computer models for oil spill trajectories provided by federal partners. (Respond)
20. Monitor and report damages and impacts to critical private sector facilities, infrastructure, and systems (including but not including wastewater and drinking water, and nuclear power plants). (Respond)
21. Minimizes environmental damage and contamination due to: (Respond)
    a. Disaster Debris Management.
    b. Surface Water Contamination.
    c. Hazardous Materials Release.
    d. Contamination of Drinking Water Supplies.
22. Minimize risks from radiological exposure. (Respond)
23. Regulate health and safety issues related to oil and gas well drilling and production. (Respond)
24. Provide state laboratory analysis for drinking water, soil contamination, air quality, and radiological contamination. (Respond)
25. Investigate suspected environmental activities/crimes including illegal dumping, terrorist activities, illegal discharges, evidence collection, custody through EGLE employees supervised by Environmental Investigation Section (EIS) under the MDNR. (Respond)
26. Provide personnel and equipment to support the FRMAC, when activated. Augment the DOE-led FRMAC during the initial response and assumes FRMAC leadership from the DOE at a mutually agreed upon time based on criteria listed in the National Radiological Incident Annex (NRIA). (Respond)
27. Provide subject matter experts and direct response actions for release of hazardous materials from its vessels, facilities, and vehicles. (Respond)
28. Provide debris management technical and operational assistance. (Recover)
29. Coordinate, integrate, and provide investigative support, intelligence analysis, and legal expertise on environmental statutes related to oil and hazardous materials incidents, including regards to criminal cases, in support of responders. (Recover)
30. Assist with Shoreline Cleanup Assessment Teams (SCAT) – walk shorelines and look for oil residue, assess damage to natural resources. (Recover)
31. Coordinate, integrate, and manage the overall state effort to detect, identify, contain, decontaminate, clean up, dispose of, or minimize discharges of oil or releases of hazardous materials; or to prevent, mitigate, or minimize the threat of potential releases. (All)
32. Provide expertise on the environmental effects of oil discharges or releases of hazardous materials and environmental pollution control techniques. (All)
33. Administer the Pollution Emergency Alerting System (PEAS). (All)
34. Provide monitoring, sampling, and analysis services for oil and hazardous materials. (All)
35. Provide on scene evaluations of dams in Michigan that are regulated by Part 307 and Part 315 of the Natural Resources and Environmental Protection Act. (All)
36. Provide geo-technical services and geological interface with Michigan Geological Survey via OGMD and RRD. (All)
37. Provide expertise on the environmental effects of oil discharges or releases of hazardous materials and environmental pollution control techniques. (All)
38. Provide radiological support to local, state, and other agencies. (All)
39. Provide drones for observing oil and hazardous materials in environment in coordination with MSP as needed. (All)

NOTE: EGLE approaches recovery activities once a location is safe to return to. These recovery activities generally include the assessment of water, wastewater, nuclear contamination, and air quality.

Tasks: State Government Support Agencies

Michigan Department of Agriculture and Rural Development (MDARD)

1. Work in cooperation with EGLE and MDNR to ensure the proper disposal of contaminated food or animal feed. (Prevent)
2. Provide on-scene technical assistance for pesticides and fertilizers. (Prevent)
3. Coordinate and conduct monitoring, sampling, inspection, and regulatory services to protect human and animal food supplies and the agricultural environment. (Prevent)
    a. Sampling, testing, and spill response for agricultural chemicals (pesticides and fertilizers) are coordinated with PEAS.
    b. Assist with disposal of household hazardous waste in coordination with EGLE.
4. Test for quality and quantity of licensed gas stations. (Protect)

5. Support the USDA/Animal and Plant Health Inspection Services for animal emergencies that impact agricultural productions (e.g., avian influenza, naturally occurring anthrax, foot and mouth disease), including the disposition of diseased livestock and poultry. (Respond)
6. Assist in developing protective measures. (Respond)
7. Provide technical assistance in the disposition of livestock, poultry, pets, and other animals contaminated with hazardous materials. (Respond)
8. Maintain the lead for animal health emergencies that impact agricultural production (e.g., avian influenza, naturally occurring anthrax, foot-and-mouth disease), including the disposition of diseased livestock and poultry. (Respond)
9. Provide mass carcass disposal. (Respond)
10. Provide technical assistance, including laboratory analysis, and SMEs, as available. Other MDARD agency support is obtained through either ESF 8 or ESF 11. Some examples are listed below: (All)
    a. Coordinate with MDHHS, which puts out 'do not eat advisories.'
    b. Assist MDHHS and MDNR in testing of fish for human consumption.

Department of Attorney General (MDAG)

1. Lead responsibility for criminal investigations of terrorist acts or terrorist threats by individuals or groups inside the State of Michigan or directed at Michigan residents and visitors or institutions abroad where such acts are within the state criminal jurisdiction of the State of Michigan. (All)
2. Generally acting through the MSP, the Michigan Attorney General, in cooperation with other state departments and agencies engaged in activities to protect national security, shall also coordinate the activities of the other members of the law enforcement community to detect, prevent, preempt, and disrupt terrorist attacks against the State of Michigan. (All)
3. Represent the State of Michigan in affirmative and defensive civil litigation and has other legal responsibilities, including resolving legal disputes between state agencies. (All)

Department of Health and Human Services (MDHHS) – Health

1. Develop, maintain, and provide information on the health effects of toxic substances. (Prevent)
2. Provide assistance on all matters related to the assessment of health hazards at a response and protection of response workers and the public health. (Respond)
3. Determine whether illnesses, diseases, or complaints may be attributable to exposure to a hazardous material. (Respond)
4. Establish disease/exposure registries and conduct appropriate clinical testing. (Respond)
5. Work in cooperation with MDRAD and MDNR to ensure the proper disposal of contaminated food or animal feed. (Respond)
6. Conduct public health laboratory testing. (Respond)

Department of Labor and Economic Opportunity (LEO)

1. Provide laboratory equipment and technical expertise for gas expertise for gas sampling and analysis. (Respond)
2. Provide radiological support to local, state, and other agencies. (Respond)

LEO - Michigan Occupational Safety & Health Administration (MIOSHA)

1. MIOSHA will provide support for the four phases (planning, mitigation, response, and recovery) of emergency management. Planning and mitigation will be supported through coordination and outreach. Where needed and as applicable and appropriate, MIOSHA will support emergency response and recovery operations as outlined below:
    a. Conduct hazard analyses.
    b. Recommend hazard controls and safe work practices.
    c. Provide expertise in safety and health risk assessment.
    d. Offer technical assistance and consultation.
    e. Provide guidance on selection and use of PPE, including respirator fit testing.
    f. Conduct on-site safety surveys and conduct atmospheric monitoring where it can be accomplished without risk to MIOSHA personnel.
    g. Answer questions related to MIOSHA regulations.
    h. Assist in the development of site health and safety plans.
    i. Collect and assemble safety and health data related to the incident.
    j. Provide pertinent information and literature on applicable safety and health guidelines. Note: OSHA and other OSHA State Plan staff will always distribute pertinent OSHA Guidelines during their emergency response.
2. MIOSHA's primary role in the Incident Command System (ICS) will be to assist the "Safety Officer". MIOSHA should not assume responsibility of the site Safety Officer. Resources may also be assigned to the Planning

Section and Operations Section to assure that information needed for hazard analysis and risk assessment is communicated to the site Safety Officer.

3. Activation of the MIOSHA team will occur in response to a declaration of emergency by the Governor and communicated through the Emergency Management Division of the Michigan State Police Department, or as directed by the Director or designee of LEO. On a case-by-case basis, the Director or designee of LEO, such as the Emergency Management Coordinator or the MIOSHA Director, can also activate the MIOSHA team in response to requests from local, state, or federal governmental agencies. However, the incident should be large-scale, incident command system based, and multi-jurisdictional. The ICS structure and principles will be applied when the MIOSHA team is responding to any incident.

LARA - Bureau of Fire Services (BFS)

1. Coordinating with other ESF 4 partners, coordinate fire management and suppression activities in the event fires involve oil or hazardous materials. (Respond)

LARA - Michigan Public Service Commission (MPSC)

1. Provide additional assistance to the extent possible in coordination with utilities for radiological. (Respond)
2. Designates an Infrastructure Liaison to address issues regarding the protection and stabilization of critical energy infrastructure affected by a release of oil or hazardous materials. (Respond)
3. Monitor petroleum fuel supply if there is a pipeline rupture that could cause a fuel shortage or distribution issues. (Recover)
4. Coordinate pipeline safety activities for natural gas pipelines only: (All)
    a. Michigan Gas Safety Standards.
    b. MPSC Pipeline safety Inspections.
    c. USDOT/PHSMA.
    d. Provide expertise in and information on oil and gas production practices and facilities.
5. Protect Underground Facilities Act/MISS DIG Program.
6. Act as primary liaison with PHSMA for oil/liquid pipelines. (All)

Department of Military and Veteran Affairs (DMVA)

1. Direct response actions for releases of hazardous materials from its vessels, facilities, vehicles, munitions, and weapons. (Respond)
2. Provide Defense Support of Civil Authorities (DSCA) in response to requests for assistance during domestic incidents. (Respond)

Department of Natural Resources (MDNR)

1. Provide inspection for oil and minerals agencies leasing land from MDNR. (Prevent)
2. Measure, evaluate, and monitor the impact of the emergency incident on state public lands, sensitive habitats, wildlife, fisheries, and natural resources. (Respond)
3. Assist in developing protective measures and damage assessments in oil and hazardous materials incidents. (Respond)
4. Provide technical assistance in the disposition of wildlife and fisheries contaminated with hazardous materials. (Respond)
5. Assist MDARD with USDA/Animal and Plant Health Inspection Services to maintain the lead for animal emergencies that impact agricultural productions (e.g., avian influenza, naturally occurring anthrax, foot and mouth disease), including the disposition of diseased livestock and poultry. (Respond)
6. Coordinate wildland fire management and suppression activities in the event fires involve oil or hazardous materials, with ESF 4. (Respond)
    a. Work collaboratively with HazMat team at direction of specialized hazmat team. Structure fires are coordinated and handled through local fire departments (See ESF 4).
7. Provide a SME for responses. Collaborate with EGLE and US Fish and Wildlife for addressing scientific issues and communicating with the scientific community for responses. (Respond)
8. Provide support and assistance with GIS capabilities and mapping. (Respond)
9. Utilize an underwater robot Remotely Operated Vehicle (ROV) owned by the Law Enforcement Division of MDNR, as needed. (Respond)
10. Inventory natural resources and analyzing impact in the Forest Resources Division/Resources Assessment Section of MDNR. (Respond)
11. Coordinate with EGLE for the SCAT Team. (Recover)
12. Provide technical assistance, including laboratory analysis, aerial photography interpretation, mapping, and Incident Management Teams, as available. (All)

13. Provide expertise on natural resources and coastal habitat, the environmental effects of oil and hazardous materials, emergency consultations for protected resources, best management practices, and appropriate cleanup and stabilization alternatives. (All)
14. Provide scientific expertise, support, and assistance in biological resources, hydrology, natural hazards, minerals, and identification of other hazards. (All)
15. Administer contracts with oil and minerals community. (All)

Department of State (MDOS)

1. Facilitate an integrated response between nations when a discharge or release crosses or threatens to cross international boundaries or involves foreign flag vessels. (Respond)

Michigan State Police (MSP)

1. Provide hazardous materials technicians available on the staff of the Bomb Squad, Commercial Vehicle Enforcement Division (CVED) and other trained MSP-personnel. (Respond)

MSP - Emergency Management Homeland Security Division (EMHSD)

1. Maintain access to a database of sites with hazardous materials (SARA Title III). (Prevent)
2. Assist in the reduction of vulnerabilities and risks associated with certain hazardous material sites. (SARA Title III) (Prevent)
3. Assist high risk chemical facilities in remaining compliant with EPA inspections. (Protect)
4. Assist local programs with the creation of SARA Title III response plans and Assist in the development of hazardous materials response plans. (Protect)
5. Coordinate the Michigan Citizen-Community Emergency Response Coordinating Council (MCCERCC). (Protect)
6. Provide a statewide hazardous material training program through the EMHSTC. (Protect)
7. Maintain close coordination, as appropriate, between EPA Region 5 and the affected regional office, DHS/USCG, the NRCC, other ESFs and Support Annexes, and the NRT. (Respond)
8. Coordinate, integrate, and guide the overall state effort to detect, identify, contain, clean up, dispose of, or minimize releases of oil or hazardous materials; or to prevent, mitigate, or minimize the threat of potential releases. (Respond)
    a. Guidance may include but is not limited to offering training and exercises and leading the Statewide Hazmat Teamwork-Group on a regular basis.
9. Develop computer models for oil spill trajectory analysis and calculation of pipeline oil discharge volumes, as requested. (Respond)
10. Coordinate with FEMA Radiological Emergency Preparedness (REP) Program, and other radiological emergency preparedness SMEs. (Respond)
    a. Utilize all-hazards approach to nuclear powerplant disaster management.
        i. Coordinate with state agencies, locals, FEMA, power plant, etc.
        ii. Coordinate FRMAC involvement
    b. Coordinate the state response activities for a radiological incident involving a facility licensed by the NRC or an Agreement State; shipment of NRC- or Agreement State-licensed materials; or radioactive materials licensed under the Atomic Energy Act.

Department of Technology, Management, and Budget (DTMB)

1. Support local, state, tribal, territorial, and insular area governments in the direct purchase and assisted acquisition of supplies, services, and equipment utilizing the DTMB Schedules. Additionally, DTMB provides leasing services for facilities and real property. (Respond)

Department of Transportation (MDOT)

1. Provide expertise on all modes of transporting oil and hazardous materials, including information on the requirements for packaging, handling, and transporting regulated hazardous materials. (Respond)
2. Issue special permits to facilitate movement of hazardous materials, hazardous waste, and hazardous debris in support of response efforts. (Respond)

JUDICIAL - Supreme Court (administered via SCAO)

1. Coordinate, integrate, and provide investigative support, intelligence analysis, and legal expertise on environmental statutes related to oil and hazardous materials incidents, including regards to criminal cases, in support of responders. (All)
2. Provide expert advice on complex legal issues, including potential criminal cases as well as potential affirmative and defensive civil litigation issues. (All)

Tasks: Federal Government Support Agencies

United States Army Corp of Engineers (USACE)

1. Provide response assistance for incidents involving contaminated debris, including CBRN contamination. The scope of actions may include waste sampling, classification, packaging, transportation, treatment, demolition, storm water management, and disposal. (These services are available independent of the DSCA process through an ESF 10 subtask to USACE.) (Respond)

United States Coast Guard (USCG)

1. Provide damage reports, assessments, and situation reports to support ESF 5. (Respond)
2. Facilitate resolution of any conflicting demands for oil and hazardous materials response resources and ensures coordination between NRT, RRT, and Unified Coordination activities, as appropriate. Coordinate through DHS/USCG headquarters the provision of personnel and logistical support from other districts to the affected area. (Respond)
3. Provide technical, coordination; administrative support; and personnel, facilities, and communications for ESF 10. (Respond)
4. Coordinate, integrate, and manage the overall Federal effort to detect, identify, contain, clean up, dispose of, or minimize releases of oil or hazardous materials; or to prevent, mitigate, or minimize the threat of potential releases. (Respond)
5. Provide Chair for NRT and Co Chairs for RRTs. (All)
6. For incidents for which DHS/USCG is the primary agency (Response):
    a. Maintain close coordination, as appropriate, between DHS/USCG headquarters and the affected Area and District office(s), the EPA, the NRCC, other ESFs and Support Annexes, and the NRT.
    b. Provide OSCs for incidents within its jurisdiction, including for the coastal zone response for incidents in which EPA is the primary agency but where the incident affects both the inland and coastal zone.
7. Provide expertise on environmental effects of oil discharges or releases of hazardous materials and environmental pollution control techniques. (All)
8. Assist in planning and preparedness efforts as Vice Chair of the NRT and Co-Chairs for RRTs. (All)
9. Maintain the National Response Center. (All)
10. Manage the Coast Guard Incident Management Assistance Team (CG-IMAT), Public Information Assist Team (PIAT), and the National Strike Force, which is composed of the National Strike Force Coordination Center and three strike teams located on the Pacific, Atlantic, and Gulf coasts. (All)
11. Provide response capabilities, technical advice, documentation and support assistance, communications, and incident management support for response activities. (All)
12. Offer expertise in domestic and international port safety and security, maritime law enforcement, ship navigation, and the manning, operation, and safety of vessels and marine facilities. (All)
13. Maintain continuously-staffed facilities that can be used for command, control, and surveillance of oil discharges and hazardous materials releases occurring within its jurisdiction. (All)

National Weather Service (NWS)

1. Provide operational weather data and prepares forecasts tailored to support the response. (Respond)
2. Provide expertise on natural resources and coastal habitat; the environmental effects of oil and hazardous materials; emergency consultations for protected resources; best management practices; and appropriate cleanup and stabilization alternatives. (Respond)
3. Provide a Scientific Support Coordinator (SSC) to the OSC for responses in coastal and marine areas. The SSC serves as the principal advisor for addressing scientific issues and communicating with the scientific community. When requested, may provide this scientific coordination support for responses in the inland zone. (Respond)
4. Predicts pollutant fate, effects, and transport as a function of time. For atmospheric releases, coordinate through the Interagency Modeling and Atmospheric Assessment Center (IMAAC), when activated. (Respond)
5. Provide information on meteorological, hydrological, ice, and oceanographic conditions for marine, coastal, and inland waters. This includes satellite surveillance, remote sensing, and aerial photogrammetry. (Respond)
6. Provide charts and maps for coastal and territorial waters and the Great Lakes. (Respond)
7. Conduct emergency hydrographic surveys, search and recovery, and obstruction location to assist safe vessel movement. (Respond)
8. Manage fisheries in Federal waters. Develop and conduct seafood safety sampling and fisheries reopening protocols in conjunction with the Food and Drug Administration and local authorities. (All)

U.S. Customs and Border Protection (CBP)

1. Where hazardous materials are transported by persons, cargo, mail, or conveyances arriving from outside the United States, provides extensive analytical and targeting capabilities through its National Targeting Center, full

examination capabilities by trained CBP officers equipped with radiation detection and nonintrusive inspection technology, and nationwide rapid technical response capabilities through its Laboratory and Scientific Services Division. (Prevent)

Additional Sources:

Atomic Energy Commission (AEC). "Atomic Energy Act" 42 U.S.C. §2011 et seq. (1946). *EPA.gov*, United States Environmental Protection Agency, 21 March 2022. https://www.epa.gov/laws-regulations/summary-atomic-energy-act. Accessed 11 April 2022.

Michigan Legislature. "The Natural Resources and Environmental Protection Act, 1994 PA 451, as amended." Legislature.mi.gov, Pub. 30 March 1995. http://www.legislature.mi.gov/(S(3qiduhhzetg0assh4recjnyj))/mileg.aspx?page=GetObject&objectname=mcl-Act-451-of-1994. Accessed 11 April 2022.

ESF 11: AGRICULTURE AND NATURAL RESOURCES

Definition/Purpose: The purpose of ESF 11 is to organize and coordinate state support for the protection of the state's agricultural and natural and cultural resources during state emergencies.

Scope: Activities in this ESF support the agricultural, natural, and cultural resources. Primary functional responsibilities in ESF 11 include:

- Providing nutrition assistance.
- Responding to animal and agricultural health issues.
- Providing technical expertise and coordination in support of animal and agricultural emergency management, including household pets, service and assistance animals, agricultural animals/livestock, wildlife, and other animals.
- Ensuring the safety and defense of the state's supply of meat, poultry, and processed egg products.
- Protecting natural, cultural resources, and historical properties.

Core Capabilities: Logistics and Supply Chain Management; Mass Care Services; Critical Transportation; Environmental Response/Health and Safety; Public Health, Healthcare, and Emergency Medical Services; Infrastructure Systems

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 11 supports multiple Lifelines, however the Lifeline most impacted by ESF 11 is the Food Water and Shelter Lifeline.

Other ESF Overlap:
ESF 6: Mass Care, Emergency Assistance, Temporary Housing, and Human Services – The management and sheltering of animals in disasters, especially pets, service and assistance animals, and exotic animals, requires coordination between ESF 6 and ESF 11.
ESF 8: Public Health and Medical Services – Often diseases of zoonotic nature or origin, as well as plant diseases and pests overlap between ESF 11, and ESF 8 due to the nature of disease expansions.

Other Plans and Annexes:
Disaster-specific Annex: Drought – Severe droughts impact ESF 11 by impacting natural growth as well as agricultural growth, including but not limited to farming and crops, and animal health and wellness.
Disaster-specific Annex: Flooding – Similar to droughts, severe flooding may impact ESF 11 agricultural health by drowning crops or animals.
Disaster-specific Annex: Insect Infestation – Insects can cause health and medical issues for agricultural animals/livestock and wildlife, and can destroy crops and agriculture, as well as natural wildlands, which requires ESF 11 support.
Disaster-specific Annex: Widespread Plant or Animal Disease – Widespread plant diseases may impact agricultural crops, as well as natural wildlife plants, causing death, decay, or blights of these crops. Widespread animal diseases pose a risk to the health and wellness of wildlife populations, livestock, agricultural animals, and other animals. ESF 11 activities must also be coordinated with ESF 8 to ensure animal diseases do not impact human health.
Disaster-specific Annex: Subsidence – ESF 11 activities may be required when subsidence threatens agricultural crops, animals, and livestock, as well as potentially impacting cultural sites.
Disaster-specific Annex: Extreme Temperatures – Extreme high or low temperatures require the coordination with ESF 11, ESF 8, and ESF 12 to ensure the health and safety of not only the human population, but also agricultural animals/livestock, household pets, service and assistance animals, and other animals. Extreme temperatures may also threaten the safety and defense of Michigan's supply of meat, poultry, and processed egg products.
Disaster-specific Annex: Hazardous Materials Incidents – Incidents in which hazardous materials impact animal populations may require ESF 11 activities. Hazardous materials, including oil and natural gas, may contaminate natural habitats and impact wildlife.
MEMP Animal Disaster Response Annex (101b) – This annex is not housed within the MEMP however it is closely tied with ESF 11. The MEMP Animal Disaster Response Annex addresses specific concerns surrounding livestock, domestic, and wild animal health with regards to diseases; it also addresses animal sheltering in disasters and secondary incidents related to animals in disaster response and recovery.

Other Areas of Interest:
A USDA Agricultural Disaster Designation does not always require a Governor's request, as the USDA can issue this designation without a state request.

In the event of a plant or animal disease, these entities can help enforce a quarantine if so authorized or deputized by the Attorney General: DOJ, DOT, USPS, DHS, MSP, MDOT.

D-SNAP is a program which is initiated by the federal government to provide feeding benefits to disaster survivors and is then managed and maintained through State of Michigan agencies.

Tasks: Lead Agency

Michigan Department of Agriculture and Rural Development (MDARD)

1. Coordinate with ESF 8 on zoonotic disease surveillance activities. (Prevent)
2. Detect animal disease anomalies and pests and assigns foreign animal disease diagnosticians to conduct investigations. (Protect)
3. Develop and maintain bio-surveillance systems to detect exotic plant pests and disease, and coordinate surveillance activities with local, state, federal, and tribal governments. (Protect)
4. Develop an inventory of food and feed resources within Michigan in cooperation with the food industry and other governmental departments/agencies. (Protect)
5. Mitigates the intra- and inter-state movement and potential spread of exotic plant pests and diseases in the State of Michigan and United States (applies to equipment and supplies moving in and out of quarantine zones, debris removal, and movement of agricultural commodities or soils). (Mitigate)
6. After the diagnosis of a plant pest or disease, especially one of economic or environmental significance, coordinate internal and external stakeholders to facilitate a timely and efficient response. (Respond)
7. Upon request by locals, support D-SNAP efforts, including: (Respond)
    a. Supporting applications to operate the D-SNAP and issue D-SNAP benefits to qualifying households within the affected area through bridge cards and similar means.
8. Support the provision of emergency food supplies available to households for take-home consumption in lieu of providing D-SNAP benefits. (Respond)
9. As needed, work with state, federal, voluntary, and private agency partners to develop a plan of operation that ensures timely distribution of food, in good condition, to the proper location. (Respond)
10. Facilitate communication for resources and reach back from private and public sector agricultural and animal industry groups, animal NGOs, universities/biomedical research facilities, zoos/exhibitors, commercial breeders, animal transporters, and national subject matter experts who could consult on specific animal and agricultural topics. (Respond)
11. Work with local, state, tribal, and federal authorities, and industry to conduct tracing, recall, and control of adulterated regulated products. This includes overseeing proper disposal of adulterated products in order to protect public health and the environment in the affected area. (Respond)
12. Coordinate with USDA on potential emergency loans for the agriculture sector, disaster assistance programs, and technical expertise. (Respond)
13. Assist in providing technical assistance, subject matter expertise, and support for biological, chemical, and other hazardous agents through contaminated facility remediation, environmental monitoring, and contaminated agriculture (animal/crops) and food product decontamination and disposal. (Respond)
14. Provide protective action assistance through the Advisory Team for the Environment, Food, and Health. (Respond)
15. Support whole-community, multi-agency coordination with governmental organizations and NGOs engaged in or coordinating animal response activities. (Respond)
16. Provide technical assistance and subject matter expertise regarding animal response issues. (Respond)
17. Monitor and report damage and impacts on damaged food and agricultural structures. (Respond)
18. Coordinate with the USDA and other appropriate departments/agencies in the assessment of damage and impact to agricultural resources and enterprises. (Respond)
19. Assist in food procurement, safety, and sanitation, and the identification and establishment of warehousing and feeding facilities. (Respond)
20. Assist with and coordinate animal care and animal health in shelters. (Respond)
21. Coordinate and conduct monitoring, sampling, inspection, and regulatory services to protect human and animal food supplies and the agricultural environment. (Respond)
22. Issue agricultural advisories and protective action guidance as needed. (Respond)
23. Coordinate tasks with other ESFs, and voluntary animal care organizations to respond. (Respond)
24. Provide technical assistance as requested on pet/animal and agriculture issues to support EMHSD at local/state emergency operations centers, and interim operating facilities. (Respond)
25. Coordinate with appropriate Recovery Support Functions (RSF) for transition of animal and agricultural response to recovery. (Recover)
26. Assist with the Governor's request for a USDA Agricultural Disaster Designation. (Recover)
27. Coordinate with federal authorities in administering federal assistance related to agricultural damage, farmers, and related food enterprises. (Recover)
28. Assist in post-incident wildlife care services. (Recover)

29. Identify and confirm the presence of newly detected exotic plant pests and disease in the State of Michigan. (All)
30. Provide technical expertise in assessing humane care of animals during evacuation, transportation, and sheltering. (All)
31. Provide species-related subject matter expertise. Coordinate unconventional animal situations with the USDA and appropriate NGOs. (All)
32. Provide technical expertise in veterinary medicine, animal husbandry, animal transportation, euthanasia, bio-physiology, toxicology, and radiation biology. (All)
33. Assess whether regulated meat, poultry, and egg product processors, distributors, and importers in the affected area can provide safe meat, poultry, and processed egg products. The operations of regulated facilities that cannot produce unadulterated products are suspended, and other regulated facilities continue to undergo regular or enhanced inspection and verification, including laboratory monitoring of meat, poultry, and processed egg product samples. (All)
34. Provide technical assistance and assessment of facilities and businesses regulated under the Animal Welfare Act (includes zoos/exhibitors, research laboratories, commercial breeders, animal transporters) and of USDA regulated select agent facilities. (All)
35. Coordinate jointly with EGLE and MDHHS food and environmental testing services. (All)
36. Provide on-scene technical assistance for pesticides and fertilizers. (All)
37. Coordinate with ESF 8 on animal/veterinary issues. (All)

Tasks: State Government Support Agencies

Department of Attorney General (MDAG)

1. May issue animal and plant quarantines and issue injunctions to be enforced if not followed. (All)

Department of Education (MDE)

1. Work with local, state, tribal, federal, voluntary, and private agency partners to develop a plan of operation that ensures timely distribution of food in good condition to the proper location, once need has been determined. (Protect)
2. Coordinate with USDA's Agricultural Marketing Service and Farm Service Agency to determine the availability of USDA foods that could be used for human consumption and Assess damage to food supplies. (Respond)
3. Coordinate with the federal, state, local, and tribal officials, and NGO partners to determine nutrition needs of affected populations; the federal government may initiate the D-SNAP program, which the state responds to. (Respond)
4. Authorize the use of USDA commodities for feeding disaster survivors. (Respond)

Department of Environment, Great Lakes, and Energy (EGLE)

1. Work with state and federal agencies, and the private sector to identify suitable and available antimicrobial and other pesticides to be used to treat and decontaminate crops, environmental surfaces, and water. Ensure the pesticides and other chemicals used will not impact rivers, lakes, and other water resources. (Prevent)
2. Mitigate the interstate movement and potential spread of exotic plant pest and disease in the State of Michigan and United States (applies to equipment and supplies moving in and out of quarantine zones, debris removal, and movement of soils). (Prevent)
3. Work with local, state, tribal and federal authorities, and industry, in overseeing proper disposal of adulterated products in order to protect public health and the environment in the affected area. (Prevent)
4. Monitor and regulate subsidence threats through the Oil, Gas, and Minerals Division (OGMD), and in coordination with the Michigan Geological Survey in western Michigan. (Protect)
5. Coordinate the assessment, repair, and restoration of damaged dams, water supply systems, and wastewater. (Respond)
6. Provide technical assistance, subject matter expertise, and support for biological, chemical, and other hazardous agents through contaminated facility remediation, environmental monitoring, and contaminated agriculture (animal/crops) and food product decontamination and disposal. (Recover)
7. Provide technical assistance in determining when water is suitable for human consumption. (All)
8. Administer the Pollution Emergency Alerting System (PEAS). (All)
9. Coordinate jointly with MDHHS and MDARD food and environmental testing services. (All)

Department of Health and Human Services (MDHHS) – Health

The MDHHS provides information and support to the lead agencies in this ESF and perform few specific individual tasks and functions.

1. Coordinate with ESF 8 on zoonotic disease surveillance activities. (Prevent)
2. Coordinate with various ESFs to issue advisories to appropriate state, local, tribal, and federal officials to facilitate a timely and efficient response following a diagnosis of disease. (Respond)

3. Coordinate with local, state, and tribal officials, as well as with Federal and NGO partners, to determine the nutrition needs of the population in the affected areas. (Respond)
4. Support the MDARD and its authority to manage a foreign animal disease response for livestock or poultry diseases exotic to the United States that are either not or only mildly zoonotic. (See ESF 8). (Respond)
5. Provide support through subject matter expertise and technical assistance (e.g., Customs and Boarder Protection Agricultural Specialists), in interdicting adulterated products in transport and at ports of entry (POE). Provide air and transport services (e.g., the U.S. Coast Guard), as needed, for personnel and laboratory samples. (Respond)
6. Support the FRMAC during the initial phase of the emergency and later phases of a nuclear incident. Also provide protective action assistance through the Advisory Team for the Environment, Food, and Health. (Respond)
7. Provide advisory when needed for the suitability of water for human consumption. (Respond)
8. Identify and provide qualified veterinary medical personnel for events requiring veterinary medical services or public health support for household pets and service animals. (Respond)
9. Coordinate and provide emergency and disaster-related veterinary care services to impacted animal populations and provide veterinary public health, zoonotic disease control, environmental health, and related services. (Respond)
10. Coordinate with ESF 8 on animal/veterinary issues. (All)
11. Conduct public health laboratory testing for the safety of eggs and egg products for human consumption. (All)
12. Coordinate jointly with EGLE and MDARD food and environmental testing services. (All)

LEO - Michigan Occupational Safety & Health Administration (MIOSHA)

1. Provide worker safety and health technical assistance during emergency animal health and Natural, Cultural, Historic (NCH) resources protection activities. This assistance may include site safety monitoring, worker exposure sampling and analysis, and respirator fit testing. (Respond)

Michigan Economic Development Corporation (MEDC)

MEDC is the primary agency for the Cultural Resources, and Historic Properties (CH) component of ESF 11. Actions initiated under ESF 11 to protect, preserve, conserve, and rehabilitate CH resources are guided by the existing internal policies and procedures of the agencies providing support for the incident. The organizations providing support for each incident coordinate with appropriate ESFs and agencies operating as described in other annexes, including the coordinating agency for the Worker Safety and Health Support Annex, to ensure appropriate use of volunteers and their health and safety and to ensure appropriate measures are in place to protect the health and safety of all workers. Each support agency is responsible for managing its respective assets and resources after receiving direction from the primary agency.

1. Provide technical assistance in contracting, contract management, procurement, and construction inspection, as these activities pertain to CH resources. Provide CH resources assessments and reestablishment preservation, protection, and stabilization. (Prevent)
2. Coordinate CH resources identification and vulnerability assessments. (Prevent)
3. Shares best practices and assist in development of programmatic approaches to address and expedite CH-related requirements for all state actions/initiatives taken to respond to or recover from an incident requiring a coordinated state or federal response. (Prevent)
4. Provide technical advice and guidance on procedures and protocols for preservation of historic resources and identify and carry out procedures to communicate such technical guidance for use by stakeholders and participants in consultation pursuant to Section 106 of NHPA. (Prevent)
5. Facilitate development and application of protection measures and strategies for public protection. (Protect)
6. Manage, monitor, and assist in or conduct response actions to minimize damage to CH resources. (Respond)
7. Shares best practices and assist in development of programmatic approaches to address and expedite CH-related requirements for all state actions/initiatives taken to respond to or recover from an incident requiring a coordinated state or federal response. (Respond)
8. Provide assistance and expertise in addressing impacts to properties of traditional religious and cultural importance. (Respond)
9. Provide up-to-date geospatial data related to impacted CH resources and develop and provide standard operating procedures for collecting CH digital data, conducting GIS analyses, and disseminating geospatial products related to CH resources, such as maps. (Respond)
10. Coordinate the historic preservation compliance requirements for all response activities funded through the Stafford Act, including mission assignments. Advise the SEOC on issues related to historic preservation compliance. (Respond)
11. Provide assistance on issues related to historic properties and cultural resources damaged by disasters. (Recover)

12. Coordinate with the Heritage Emergency National Task Force and local, state, tribal, territorial, insular area, Federal, and private-sector entities to identify priority disaster-specific policy initiatives—such as emergency appropriations, programmatic agreements, or program alternatives—to address specific disaster conditions. (Recover)
13. Assist in identifying structures, sites, facilities, items, artifacts, and geographic features of importance in disaster areas. (Recover)
14. Coordinate the issuance of grants for the restoration of disaster damaged historic properties and sites. (Recover)

Department of Licensing and Regulatory Affairs (LARA)

1. Support the provision of technical assistance in contracting, contract management, procurement, and construction inspection, by DTMB, as these activities pertain to Natural and Cultural Resources and Historic Properties (NCH). Provide NCH resources assessments and reestablishment (natural resources), preservation, protection, and stabilization. (Respond)

Department of Military and Veteran Affairs (DMVA)

1. Assess the availability of MDMVA food supplies and storage facilities capable of storing dry, chilled, and frozen food; also assess availability of MDMVA transportation equipment, material handling equipment, and personnel for support. Assess the availability of laboratory and diagnostic support, subject matter expertise, and technical assistance that may be provided. (Respond)
2. Assist during animal and agricultural emergency response, as appropriate. Provide resources, including senior Army Veterinary Corps Officers, to function as Defense Veterinary Liaison Officers and Defense Veterinary Support Officers (who serve as the onsite point of contact for DOD veterinary functions) and other military specialists trained in foreign animal disease diagnosis, epidemiology, microbiology, immunology, entomology, pathology, and public health. (Respond)
3. Provide laboratory support to assist and augment the capabilities of Animal and Plant Health Inspection Service (APHIS). (Respond)
4. Provide support in interdicting adulterated products in transport and at ports of entry; subject matter expertise and technical assistance (e.g., Customs and Border Protection Agricultural Specialists); and air and transport services (e.g., the U.S. Coast Guard), as needed, for personnel and laboratory samples. (Respond)

Department of Natural Resources (MDNR)

1. Provide scientific/technical advice, information, and other assistance to help prevent or minimize injury to and to reestablish or stabilize National Cultural Resources and Historic (NCH) resources. (Prevent)
    a. Areas of concern include terrestrial and aquatic ecosystems; biological resources, including fish and wildlife, threatened and endangered species, and migratory birds; historic and prehistoric resources; mapping and geospatial data; geology; hydrology, including real-time water flow data; earthquakes and other natural hazards; onshore and offshore minerals; energy; and coal mining.
2. Detect animal disease anomalies and pests and assign foreign animal disease diagnosticians to conduct investigations. (Prevent)
3. Coordinate with ESF 8 on zoonotic disease surveillance activities. (Prevent)
4. Develop plant pest and disease exclusion systems and coordinate implementation across the interagency mitigating the risk of introduction of exotic plant pest and disease from foreign climates into the State of Michigan, or foreign countries into the United States (foreign responders, equipment, supplies, and food). (Prevent)
5. Provide support through subject matter expertise and technical assistance (e.g., Customs and Boarder Protection Agricultural Specialists), in interdicting adulterated products in transport and at ports of entry (POE). (Prevent)
6. Circulate warning notice to appropriate state, local, tribal, and federal officials in order to facilitate a timely and efficient response to an identified disease. (Protect)
7. Develop and maintain bio-surveillance systems to detect exotic plant pests and diseases, and coordinate surveillance activities with local, state, tribal, and federal governments. Identify and confirms the presence of newly detected exotic plant pests and disease in the State of Michigan. (Respond)
8. Promote urban forestry measures to minimize storm-related tree damage. (Mitigate)
9. Assist in responding to disease events involving free ranging fish and wildlife populations, including infectious diseases, biohazard events, and toxicological diseases resulting from exposure to environmental contaminants by providing wildlife emergency response teams with: (Respond)
    a. Geospatial assessment and mapping tools.
    b. Assistance in the identification of new emerging and resurging zoonotic diseases.
    c. Diagnostic laboratory support (up to and including biological safety Level 3 containment).
    d. Assistance with the prevention, control, and eradication of any disease involving wildlife.
    e. Carcass disposal facilities, as appropriate.
10. Coordinate tasks with MDARD, and voluntary animal care organizations to respond. (Respond)

11. Coordinate emergency response to newly detected plant pests and disease of economic or environmental significance with local, state, tribal, and federal governments. (Respond)
12. Support ESF 15 by providing wildlife subject matter expertise in support of Joint Information Center (JIC) operations. (Respond)
13. Assist in emergency compliance with relevant state and federal environmental laws, such as emergency permits/consultation for natural resources use or consumption, during emergency response activities. (Respond)
14. Manage, monitor, and assist in or conduct response actions to minimize damage to NCH resources. (Respond)
15. Provide up-to-date geospatial data related to impacted NCH resources and develop and provide standard operating procedures for collecting NCH digital data, conducting GIS analyses, and disseminating geospatial products related to NCH resources, such as maps. (Respond)
16. Minimize damage to natural resources through efforts by the Department. (Respond)
17. Provide debris management technical and operational assistance, as needed. (Respond)
18. Protect visitors at state parks and recreation areas. (Respond)
19. Conduct damage assessment, as relevant. (Respond)
20. Coordinate the assessment, repair, and restoration of damaged state parks, state recreation areas, and other state recreation lands. (Recover)
21. Serve as the point of contact for wildlife disease emergencies, including zoonotic diseases outbreaks. (All)

Department of State (MDOS)

1. Facilitate an integrated response between nations and/or states when animal and/or plant disease outbreaks represent transborder threats. (Respond)
2. Facilitate sharing of technical information and development of agreements between the United States and foreign nations to preserve and protect natural and cultural resources and historic properties in conjunction with the Federal Department of State. (Respond)

Michigan State Police (MSP)

1. Mitigate the interstate movement and potential spread of exotic plant pest and disease in the State of Michigan and United States (applies to equipment and supplies moving in and out of quarantine zones, debris removal. (Mitigate)
2. Provide support in interdicting adulterated products in transport and at ports of entry; subject matter expertise and technical assistance (e.g., Customs and Border Protection Agricultural Specialists); and air and transport services (e.g., the U.S. Coast Guard), as needed, for personnel and laboratory samples. (All)

MSP - Emergency Management Homeland Security Division (EMHSD)

1. Provide incident coordination and mission assignments, as appropriate. (Respond)
2. Provide logistics support to obtain needed resources during incidents requiring state assistance to protect life and property and sustain life for state declared incidents. (Respond)
3. Coordinate the environmental and historic preservation compliance requirements for all response activities funded through the Stafford Act, including mission assignments. Advise the Federal Coordinating Officer on issues related to environmental and historic preservation compliance. (Respond)
4. In the event of a nuclear or radiological emergency, support the FRMAC during the initial phase of the emergency and leads the FRMAC for the later phases. Also provides protective action assistance through the Advisory Team for the Environment, Food, and Health. (REP) (Respond)
5. Prepare for a Governor's request for a USDA Agricultural Disaster Designation in coordination with MDARD. (All)
6. Coordinate with appropriate Recovery Support Functions (RSF) for transition of animal and agricultural response to recovery. (Recover)

MSP - Michigan Intelligence Operations Center (MIOC)

1. Coordinate with the Infrastructure Liaison concerning all issues regarding the stabilization and reestablishment of the associated critical infrastructure sector supported by the ESF, including the allocation and prioritization of resources, demographic information about the disaster area, and private sources of food. (Prevent)
2. Maintain, through the Office of Infrastructure Protection Directorate, a database of critical infrastructure and key assets and maintain detailed information on selected sites derived from site visits and collection of vulnerability assessments. (All)

Department of Technology, Management, and Budget (DTMB)

1. Provide technical assistance in contracting, contract management, procurement, and construction inspection, as these activities pertain to NCH resources. Provide NCH resources assessments and reestablishment (natural resources), preservation, protection, and stabilization. (Respond)

2. Provide resource support for ESF 11 requirements as requested to meet the needs of the affected population(s) and area(s). (Respond)
3. Provide preservation, scientific/technical, and records and archival management advice and information…
    a. …to help secure and prevent or minimize loss of NCH resources pertaining to documentary and archival records and historic documents. (Respond)
    b. …for stabilization, security, logistics, and contracting for the reestablishment of services for damaged NCH resources pertaining to documentary and archival records and historic documents. (Respond)

Department of Transportation (MDOT)

1. Assist in developing plant pest and disease exclusion systems and coordinate implementation across the interagency mitigating the risk of introduction of exotic plant pest and disease from foreign climates into the State of Michigan, or foreign countries into the United States (foreign responders, equipment, supplies, and food). (Mitigate)
2. Assist in mitigating the interstate movement and potential spread of exotic plant pest and disease in the State of Michigan, and United States (applies to equipment and supplies moving in and out of quarantine zones, debris removal. and movement of agricultural commodities or soils). (Mitigate)
3. Assist in providing technical expertise in assessing humane care of animals during evacuation, transportation, and sheltering. (Respond)
4. Assist in providing support in interdicting adulterated products in transport and at ports of entry; subject matter expertise and technical assistance (e.g., Customs and Border Protection Agricultural Specialists); and air and transport services (e.g., the U.S. Coast Guard), as needed, for personnel and laboratory samples. (Respond)

Tasks: Federal Government Support Agencies

United States Army Corp of Engineers (USACE)

1. Provide expertise and resources to assist in the removal and disposal of contaminated and non-contaminated debris to include debris affecting NCH resources and animal carcasses. (Respond)
2. Provide emergency repair of damaged infrastructure and critical public facilities (e.g., temporary power, emergency water, sanitation systems). Support the reestablishment of critical navigation, flood control, and other water infrastructure systems, including drinking water distribution and wastewater collection systems. Where appropriate, activities to reestablish infrastructure (e.g., debris removal, and temporary housing mission) are closely coordinated with ESF 11. (Respond)
3. As ESF 3 primary agency, request ESF 11 to provide technical support to help facilitate ESF 3 efforts to obtain necessary regulatory (cultural and environmental) clearances for infrastructure reestablishment activities; seeks technical assistance from the DHS/FEMA Disability Coordinator to ensure that accessibility standards for those with disabilities and others with access and functional needs are addressed during infrastructure reestablishment activities. (Respond)

National Weather Service (NWS)

1. Provide scientific/technical advice, information, and other assistance to help prevent or minimize injury to and to reestablish or stabilize NCH resources. Areas of concern include terrestrial and aquatic ecosystems; biological resources, including fish and wildlife, threatened and endangered species, and migratory birds; historic and prehistoric resources; mapping and geospatial data; geology; hydrology, including real-time water flow data; earthquakes and other natural hazards; onshore and offshore minerals; energy; and coal mining. (Respond)
2. Make available an environmental data archive for determining baseline conditions. (Respond)
3. Provide contaminant analysis expertise and facilities. (Respond)
4. Provide aerial mapping and satellite remote sensing for damage assessment. (Respond)
5. Provide detailed site-specific weather forecasts and forecasts of travel time for river contaminants. (Respond)
6. Provide expertise and assistance on coral reefs and coral reef ecosystems. (Respond)
7. Provide expertise and consultation on marine mammals, endangered species, and essential fish habitat issues. (Respond)
8. Provide seafood inspection capabilities to assess safety, wholesomeness, proper labeling, and quality of fish and fishery products through process and product verifications, product evaluations and certifications, and laboratory analysis. (Respond)
9. Implement the activities determined appropriate to reestablish fisheries and any other natural resources or prevent a failure in the future in accordance with the Magnuson-Stevens Act (Section 312, 16 U.S.C. 1801, et seq.). (Respond)
10. Provide technical expertise pertaining to marine fisheries and marine wildlife. (Respond)

Tasks: Nonprofit Organizations

American Red Cross (ARC)

1. Identify and assess requirements for food and distribution services on a two-phase basis: 1) critical emergency needs immediately after the disaster; and 2) longer-term sustained needs after the emergency phase has ended. (Respond)
2. Support a pet/animal care task force, should one be established, by providing technical expertise on how those issues impact the sheltering of pet-owning people. (Respond)
3. Coordinate with other voluntary organizations in the distribution of food. (Respond)
4. Coordinate with organizations providing emergency animal sheltering to facilitate the ability of people to help care for their own animals at collocated sheltering sites. (Respond)
5. May provide food and hydration to animal and agriculture responders during on-scene response if the responder agencies' feeding plans cannot be implemented, when requested and resources allow. (Respond)

Michigan Voluntary Organizations Active in Disaster (MI VOAD)

1. Coordinate with other voluntary organizations in the distribution of food. (Respond)
2. Coordinate with organizations providing emergency animal sheltering to facilitate the ability of people to help care for their own animals at collocated sheltering sites. (Respond)
3. May provide food and hydration to animal and agriculture responders during on-scene response if the responder agencies' feeding plans cannot be implemented, when requested and resources allow. (Respond)

ESF 12: ENERGY

Definition/Purpose: The purpose of ESF 12 is to assist local, state, and tribal government entities, NGOs, and the private sector by coordinating government capabilities, services, technical assistance, and engineering expertise during disasters and incidents that require a coordinated state response.

Scope: Activities in this ESF ensure the continued delivery of energy to stakeholders, including disaster survivors. Primary functional responsibilities in ESF 12 include:

- Monitoring energy supplies on a state, regional, and national level which may impact the health and safety of Michigan residents or impact emergency response and recovery efforts.
- Providing technical expertise to energy owners and operators, and to federal, state, local, and tribal governments.
- Collecting, evaluating, and sharing information on energy system damages and providing estimations on energy system outages and impacts.
- Assisting with overcoming inherent energy restoration challenges.
- Providing information concerning energy restoration efforts including geographic data, projected schedules, restoration tracking, completion percentages, and other relevant information.

Core Capabilities: Infrastructure Systems; Logistics and Supply Chain Management; Situational Assessment

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 12 supports multiple Lifelines, however the Lifeline most impacted by ESF 12 is the Energy Power and Fuel Lifeline.

Other ESF Overlap:
ESF 3: Public Works and Engineering – Many forms of energy are transported through pipelines, including natural gas, refined petroleum (gasoline, diesel, etc.) and crude oil; requiring coordinating between ESFs 3, 10, and 12.
ESF 10: Oil and Hazardous Materials – Many forms of energy are created from hazardous materials and crude oil, which requires coordination between ESF 10 and ESF 12.
ESF 14: Cross Sector Business and Infrastructure – Most energy infrastructures are privately owned and operated and as such coordination between ESF 12 and ESF 14 is critical to ensure the security of energy supplies for Michigan.

Other Plans and Annexes:
Disaster-specific Annex: Severe Storms/Tornados – Often severe storms or tornados result in power outages due to downed wires, which can negatively impact energy infrastructure and ESF 12.
Disaster-specific Annex: Energy Emergencies – An energy emergency may be prompted by any number of scenarios, but ultimately result in actions taken by the Governor to secure the energy supply and infrastructure, which requires significant coordination with and by ESF 12.
Disaster-specific Annex: Nuclear Power Plant Incidents – Nuclear power plants supply energy to many Michigan energy users, and disruption to the power plant may negatively impact the energy supply monitored by ESF 12.
Disaster-specific Annex: Oil and Gas Well/Pipeline Incidents – Oil and natural gas (ESF 10 materials) are both forms of energy which are transported through pipelines (managed by ESF 3), and disruptions to these forms of energy impact ESF 12's overall energy outputs.
Disaster-specific Annex: Extreme Temperatures – Increased heating and cooling needs by businesses and residents and visitors in Michigan in extreme temperatures creates a strain on existing energy supplies and infrastructure, which impacts overall ESF 12 operations.
Disaster-specific Annex: Resources Shortages – One critical resource which may be of concern is the shortage of gasoline and other refined petroleum fuels, which could spur energy shortages, distribution disruptions, or price gauging, which require action by ESF 12.

Other Areas of Interest:
The term "energy" includes producing, storing, refining, transporting, generating, transmitting, conserving, building, distributing, maintaining, and controlling energy systems and system components.

Tasks: **Lead Agency**
LARA – Michigan Public Service Commission (MPSC)

1. Identify and communicate threats to specific energy facilities. (Prevent)
2. Promote and require electrical infrastructure reliability enhancement measures to minimize storm-related electrical outages. (Prevent)
3. Support efforts to improve the electric and natural gas sector's cybersecurity posture, encourages cyber information sharing, and proactively reviews cyber security programs and plans. (Prevent)

4. Conduct emergency preparedness planning, including capabilities development, administering operational programs for all energy resources, and conducting energy emergency exercises with the energy industry, federal partners, and local, state, tribal territorial governments. (Protect)
5. Analyze potential impacts to the electric power, oil, natural gas, and coal infrastructures and the effect a disruption may have on other critical infrastructure. (Protect)
6. Actively participate in workshops, conferences, training, and planning forums to develop and identify processes, procedures, tactics, resources, and technologies to enhance MPSC's preparedness activities for disasters and other related energy events. (Protect)
7. Participate in post-incident hazard mitigation studies to reduce the adverse effects of future disasters; and lead and participate in various best practices and lessons learned forums to ensure future disruptions are addressed in the most effective manner; provide oversight and rate recovery for the maintenance and modernization of systems and infrastructure to increase the reliability, efficiency, and use of the electricity infrastructure. (Mitigate)
8. Support the Department of Energy's (DOE)'s responsibilities identified in the Federal Power Act. (Respond)
9. Execute responsibilities set forth in a State of Energy Emergency, PA 191, and carry out orders from the Governor. (Respond)
10. Interface with federal partners in instances of gas procurement and curtailment through interstate pipelines in times of existing or imminent severe natural gas shortage which endangers the supply of natural gas for high priority uses. (Respond)
11. Assist the state, and local governments in the preparation of Energy Security Plans to improve the reliability and resiliency of the state's energy systems. (Respond)
12. Serve as the primary state interface for the prioritization and coordination of energy sector activities, including but not limited to security, situational awareness, planning, preparedness activities, risk assessments, sector and national reporting, and exercises. (Respond)
13. Lead incident response activities pertaining to the energy critical infrastructure sector consistent with statutory authorities and other appropriate directives. (Respond)
14. Coordinate reports from energy-related asset owners to assess damages to energy infrastructure. (Respond)
15. Investigates the construction of gas pipelines and provide on-scene work and coordination with locals and first responders for reports. (Respond)
16. Provide engineering and technical support as necessary. (Respond)
17. Assist operators in minimizing the disruption of natural gas energy production by expediting review and approval of repair procedures for damaged facilities and/or in the prompt review and approval of proposals to resume production through the temporary rerouting of oil and gas production until permanent repairs can be made.
18. Coordinate with the PHMSA. (Respond)
19. Coordinate with the Regional Transmission Operators, the federal government, and independent operators for electric rerouting while damaged facilities are in repair. (Respond)
20. Coordinating with the MSP, recommend to Governor's office the waiving of motor carrier safety regulations, such as Hours of Service Waivers, to meet emergency energy supply delivery requirements. (Respond)
21. Evaluate requests from the petroleum sector to seek air quality waivers (e.g., the waiver of REID vapor pressure requirements) from EGLE and EPA for motor fuels in order to address supply shortages associated with natural disasters or significant disruptions in fuel production or distribution systems. (Respond)
22. Monitor and report, with cooperation of private sector partners, damage and impacts to critical private sector facilities, infrastructure. (Respond)
23. Work with the MSP/EMHSD to communicate restoration priorities to electrical service providers to facilitate statewide incident recovery. (Respond)
24. Monitor and report on the assessment, repair, and restoration of damaged energy infrastructure owned by private sector. (Respond)
25. Support restoration efforts during and after energy emergencies. (Recover)
26. Assess damage to energy-related gas pipelines. (Recover)
27. Help identify and prioritize critical energy infrastructure with Michigan State Police and the private sector. (All)
28. Participate in energy-related prevention, protection, mitigation, response, and recovery activities for the state's energy infrastructure. (All)
29. Provide information, in cooperation with local, state, and tribal governments and energy industry officials, on energy supply and demand conditions, as well as the requirements for and the availability of materials and services critical to energy supply systems (e.g., outages, restoration status, energy infrastructure status). (All)
30. Monitor nuclear energy output as a contributor to overall electric generation for the State of Michigan. (All)
31. Lead or support coordination and information sharing efforts with the energy private sector and with local, state, federal, and tribal entities. (All)
32. Monitor and communicate with various associations that represent portions of the energy sector. (All)
33. Provide information on natural gas production and supply on state lands in conjunction with EGLE and ESF 1 (All)
34. Coordinate with Blackstart capable private sector partners. (All)
35. Coordinate natural gas pipeline safety activities and Assist PHMSA with petroleum pipelines as needed. (All)

36. Coordinate activities and share information needed to ensure that the energy infrastructure sectors subject to each agency's jurisdiction or oversight can efficiently and effectively coordinate and integrate energy assurance/security activities. (All)

Tasks: State Government Support Agencies

Governor's Office

1. Address waivers required for fuel use/management during disaster relief, such as the Jones Act (i.e., DHS authority) and the use of summer versus winter fuel mix versus reformulated gasoline as required (i.e., EPA authority). (Respond)

Michigan Department of Agriculture and Rural Development (MDARD)

1. Gather and communicate information, as appropriate, from the USDA Rural Utilities Services (RUS) -financed systems to assess impacts and needs. (Respond)
2. Reach out to the USDA to provide information (e.g., location, type, owners, and/or management service) to the SEOC on available USDA-financed, habitable housing units in its inventory that are not under lease or under agreement of sale for response or emergency personnel and their organizations' representatives to contact for housing during response activities. (Respond)
3. May assist with identifying owners of available apartments in Federally or State-funded, multi-family housing to provide shelter to emergency response personnel in the affected area. (Respond)
4. Coordinate the collection of motor vehicle fuel supply information necessary to evaluate an enforcement discretion request. (Respond)
5. Assist in identifying critical water and wastewater systems requiring priority power restoration. (Respond)
6. Coordinate the collection of motor vehicle fuel supply information necessary to evaluate an enforcement discretion request. (Respond)
7. Provide technical support and access to both damage assessments and restoration efforts for electric power generation, transmission, and distribution in the USDA Rural Utilities Services (RUS) -financed systems. (Recover)

Department of Attorney General (MDAG)

1. Perform due diligence in coordination with other state departments and agencies pertaining to the implementation of emergency waivers. (Respond)
2. Monitor and intercept price gauging for petroleum fuels. (Respond)

Department of Environment, Great Lakes, and Energy (EGLE)

1. Conduct and coordinate environmental radiological monitoring through MPSC/National Nuclear Security Administration and in consultation with applicable local, state, tribal, and federal agencies, including the activation and operation of the FRMAC. (Protect)
2. Monitor and regulates subsidence threats in the EGLE/OGMD. (Protect)
3. Regulates health and safety issues related to oil and gas well drilling production. (Protect)
4. Coordinate, in collaboration with MDARD, the collection of motor vehicle fuel supply information necessary to evaluate an enforcement discretion request. (Protect)
5. Use Bureau of Reclamation personnel to assist in the repair of damaged hydropower generation facilities. (Respond)
6. Advise government leadership and coordinating agencies during a radiological event. (Respond)
7. Provide subject matter expertise on radiation during a radiological incident to the Governor's Office and coordinating agencies. (Respond)
8. Assist in identifying critical water and wastewater systems requiring priority power restoration. (Respond)
9. Monitor and report damage and impacts to critical private sector facilities, infrastructure, and systems through the Michigan Department of Environmental Great Lakes, and Energy/Oil, Gas, and Minerals Division (EGLE/OGMD). (Respond)
10. Monitor private oil and gas well or pipeline accidents through the EGLE/OGMD. (Respond)
11. Provide a post-disaster event technical review (i.e., Disaster Initiated Review) of preparedness as a requirement for an NPP restart or continued operation. (Recover)
12. Provide technical assistance for the assessment of hydroelectric facilities and flood control actions as they affect energy production. (All)
13. Through National Nuclear Security Administration (NNSA), provide support in the areas of atmospheric dispersion modeling, environmental radiation monitoring, and medical management of radiation injuries in the event of an accident or incident involving nuclear or radiological materials. (All)
14. Assist local, state, and tribal authorities with requests for special permits and approvals relating to the movement of hazardous materials in support of the state's energy demands. (All)
15. Regulate the state's civilian use of nuclear fuels and materials, including commercial nuclear power plants. (All)

16. Provide information and technical assessment regarding nuclear power plants. (All)

Department of Labor and Economic Opportunity (LEO)

1. Analyze and model the potential impacts to the electric power, oil, natural gas, and coal infrastructures; analyze market impacts to the economy; and determine the effect a disruption has on other critical infrastructure. (Prevent)

LEO - Michigan Occupational Safety & Health Administration (MIOSHA)

1. MIOSHA will provide support for the four phases (planning, mitigation, response, and recovery) of emergency management. Planning and mitigation will be supported through coordination and outreach. Where needed and as applicable and appropriate, MIOSHA will support emergency response and recovery operations as outlined below:
    a. Conduct hazard analyses.
    b. Recommend hazard controls and safe work practices.
    c. Provide expertise in safety and health risk assessment.
    d. Offer technical assistance and consultation.
    e. Provide guidance on selection and use of PPE, including respirator fit testing.
    f. Conduct on-site safety surveys and conduct atmospheric monitoring where it can be accomplished without risk to MIOSHA personnel.
    g. Answer questions related to MIOSHA regulations.
    h. Assist in the development of site health and safety plans.
    i. Collect and assemble safety and health data related to the incident.
    j. Provide pertinent information and literature on applicable safety and health guidelines. Note: OSHA and other OSHA State Plan staff will always distribute pertinent OSHA Guidelines during their emergency response.
2. MIOSHA's primary role in the Incident Command System (ICS) will be to assist the "Safety Officer". MIOSHA should not assume responsibility of the site Safety Officer. Resources may also be assigned to the Planning Section and Operations Section to assure that information needed for hazard analysis and risk assessment is communicated to the site Safety Officer.
3. Activation of the MIOSHA team will occur in response to a declaration of emergency by the Governor and communicated through the Emergency Management Division of the Michigan State Police Department, or as directed by the Director or designee of LEO. On a case-by-case basis, the Director or designee of LEO, such as the Emergency Management Coordinator or the MIOSHA Director, can also activate the MIOSHA team in response to requests from local, state, or federal governmental agencies. However, the incident should be large-scale, incident command system based, and multi-jurisdictional. The ICS structure and principles will be applied when the MIOSHA team is responding to any incident.

LEO - Michigan State Housing Development Authority (MSHDA)

1. Identify owners of available apartments in Federally or State-funded, multi-family housing to provide shelter to emergency response personnel in the affected area. (Respond)

Department of Licensing and Regulatory Affairs (LARA)

1. Perform due diligence in coordination with other state departments and agencies (including internal) pertaining to the implementation of emergency waivers. (Respond)

Department of Military and Veteran Affairs (MDMVA)

1. Provide and receives training, as required, between MPSC and MDMVA Energy personnel specific to the emergency relief efforts associated with MPSC operations. (Prevent)
2. Participate in MDMVA/MPSC-planned training and exercises to assess the level of readiness in advance of an actual disaster. (Prevent)
3. Encourage professional exchanges, collaboration, and formal liaison relationships between all MPSC and MDMVA Energy components, including but not limited to, headquarters, operations centers, and military installations. (Prevent)
4. Establish a Liaison Officer (LNO) arrangement with MPSC who will be activated when appropriate. The LNO will coordinate with MPSC and serve as a liaison between MPSC and MDMVA during disaster relief operations. (Respond)
5. Address waivers required for fuel use/management during disaster relief, such as the Jones Act (i.e., DHS authority) and the use of summer- versus winter-fuel mix versus reformulated gasoline as required (i.e., EPA authority). (Recover)
6. Establish a process in coordination with MPSC for accessing product when needed using available transportation assets. (Recover)

7. Establish a process in coordination with MPSC to replenish fuel used to support disaster relief operations. (Recover)
8. Identify a reporting method available when energy may be impacted, that allows timely system analysis that leverages information between each agency to perform critical node analysis to identify locations within the affected areas. (Recover)

Department of State (MDOS)

1. Coordinate with other states, foreign nations and international organizations for assistance and information regarding energy supply and system damage. (Respond)
2. Assist in implementation of emergency-related inter- state and -national energy agreements. (Respond)

MSP - Criminal Justice Information Center (CJIC)

1. Serve as the primary point for government agencies to coordinate, integrate, and share information related to all domestic cyber threat investigations. (Respond)

MSP - Emergency Management Homeland Security Division (EMHSD)

1. Conduct national security emergency preparedness planning, including capabilities development; administering operational programs for all energy resources, and conducting energy emergency exercises with the energy industry, Federal partners, and local, state, tribal territorial governments. (Protect)
2. Assist the state, and local governments in the preparation of Energy Security/Assurance Plans to improve the reliability and resiliency of the state's energy systems. (Prevent)
3. Provide oversight and evaluation for the emergency preparedness of state and local response assets and planning for communities surrounding the three commercial nuclear power plants in the State of Michigan. (Prevent)
4. Assist local partners to inform and educate the public about radiological emergency preparedness. (Prevent)
5. Provide support in the areas of atmospheric dispersion modeling, environmental radiation monitoring, and medical management of radiation injuries in the event of an accident or incident involving nuclear or radiological materials. (Prevent)
6. Coordinate environmental radiological monitoring through National Nuclear Security Administration and in consultation with applicable local, state, tribal, territorial, and/or Federal agencies, including the activation and operation of the Federal Radiological Monitoring and Assessment Center. (Prevent)
7. Identify a reporting method that allows timely system analysis that leverages information between each agency to perform critical node analysis to identify locations within the affected areas. (Prevent)
8. Oversee the health and safety preparedness for residents living around commercial nuclear power plants to ensure residents and visitors would be adequately protected in the event of a nuclear power plant (NPP) accident. (Protect)
9. Consult with MPSC on potential waivers to motor carrier safety regulations, such as Hours of Service waivers, to meet emergency energy supply delivery requirements. (Respond)
10. Advise government leadership and coordinating agencies during a radiological event. (Respond)
11. Provide subject matter expertise on radiation during a radiological incident to the Governor's Office and coordinating agencies. (Respond)
12. Provide a post-disaster event technical review (i.e., Disaster Initiated Review) of preparedness as a requirement for an NPP restart or continued operation. (Recover)

MSP - Michigan Intelligence Operations Center (MIOC)

1. Identify and communicate threats to specific energy facilities. (Prevent)
2. Develop and maintain a critical infrastructure list of facilities. (Protect)
3. Coordinate with the private sector to conduct vulnerability assessments of energy infrastructure associated with terrorism; and coordinate the implementation of protective measures. (Protect)
4. Lead efforts to improve the state's cybersecurity posture, coordinate cyber information sharing, and proactively Manage state cyber risks. (Protect)
5. Share and coordinate vulnerability information and threat analysis through information products and alerts. (Protect)
6. Reduce risks within and across all critical infrastructure sectors by partnering with law enforcement agencies and the intelligence community. Coordinate efforts among local, state, and tribal governments as well as control systems owners, operators, and vendors. (Protect)
7. Assist to augment and align state government communication and outreach to the energy industry during an incident. (Respond)
8. Pursuant to a memorandum of agreement, coordinate with the MPSC and Customs and Border Protection on whether national defense considerations warrant waiver of the U.S. Cabotage law for the movement of energy supplies. (Respond)

9. Provide situational awareness and prioritized recommendations concerning the recovery and restoration of the associated critical infrastructure sectors supported by this ESF. (Recover)
10. Analyze and model the potential impacts to the electric power, oil, natural gas, and coal infrastructures, and determine the effect a disruption has on other critical infrastructure. (All)
11. Oversee the management and maintenance of the State's Infrastructure Protection Plan. (All)
12. Manage and Coordinate with a statewide organization of Protective Security Advisors. (All)
13. Train and deploy Infrastructure Liaisons and Advisors to support incident management activities. (All)
14. Develop and maintain information on critical energy-related infrastructure on state and tribal lands. (All)

Department of Technology, Management, and Budget (DTMB)

1. Support efforts to improve the electric and natural gas sector's cybersecurity posture, encourages cyber information sharing, and proactively review cyber security programs and plans. (Prevent)
2. Coordinate with the MPSC and the private sector to conduct vulnerability assessments of energy infrastructure associated with terrorism; and coordinate the implementation of protective measures. (Prevent)
3. Lead efforts to improve the state's cybersecurity posture; coordinate cyber information sharing; and proactively manage state cyber risks. (Prevent)
4. Share and coordinate vulnerability information and threat analysis through information products and alerts. (Prevent)
5. Provide focused operational capabilities for defense of control systems environments against emerging cyber threats. (Protect)
6. Reduces risks within and across all critical infrastructure sectors by partnering with law enforcement agencies and the intelligence community, and coordinate efforts among local, state, tribal, and territorial governments as well as control systems owners, operators, and vendors. (Mitigate)
7. Collaborates with interstate and private sector Computer Emergency Response Teams to share control systems-related security incidents and mitigation measures. (Mitigate)
8. Authorizes reimbursement of natural gas purchases by any interstate pipeline, local distribution company during an existing or imminent severe natural gas shortage, that endangers the supply of natural gas for high-priority uses, and other responsibilities as set forth in the Natural Gas Policy Act of 1978. (Respond)
9. Identify a reporting method that allows timely system analysis that leverages information between each agency to perform critical node analysis to identify locations within the affected areas. (Respond)
10. Coordinate with ESF 2 – Communications to assist MPSC in efforts to aid the energy industry in providing new services or to restore existing services that are assigned Telecommunications Service Priority (TSP) restoration priorities. (Respond)

Department of Transportation (MDOT)

1. In coordination with MPSC, coordinate activities and share information needed to ensure that the energy infrastructure sectors subject to each agency's jurisdiction or oversight can efficiently and effectively coordinate and integrate energy assurance activities. (Recover)
2. Consult with MPSC on potential waives for motor carrier safety regulations, such as Hours of Service Waivers, to meet emergency energy supply delivery requirements. (Recover)
3. Act as the center for information on the location, capacity, and availability of U.S. flag vessels suitable for the movement of energy supplies, including petroleum products and liquefied natural gas. (Recover)
4. Pursuant to a memorandum of agreement, coordinate with MPSC and Customs and Border Protection on whether national defense considerations warrant waiver of the U.S. Cabotage law for the movement of energy supplies. (Recover)
5. Coordinate the collection of motor vehicle fuel supply information necessary to evaluate an enforcement discretion request. (Recover)

Tasks: Federal Government Support Agencies

United States Army Corp of Engineers (USACE)

1. Coordinate Emergency Power Team missions with power system stabilization and restoration activities to establish priorities for emergency generator installation. (Respond)
2. Assist in restoring the energy infrastructure when requested and upon approval by the Secretary of Defense. (Respond)

United States Coast Guard (USCG)

1. Through the Marine Environmental Protection program, Develop and enforces regulations to stop unauthorized ocean dumping and prevent oil and chemical spills. (Prevent)
2. Counters potential hazards and threats to America's coasts, ports, and inland waterways through numerous port security, harbor defense, and coastal warfare operations and exercises. (Protect)
3. Investigate maritime accidents, merchant vessels, offshore drilling units, and marine facilities. (Recover)

National Weather Service (NWS)

1. Provide current and forecast weather information and dispersion model forecasts through its National Centers for Environmental Prediction and its local weather forecast offices and river forecast centers. (Respond)
2. Provide public dissemination of critical event information over the NOAA All-Hazards Weather Radio System, NOAA Weather Wire Service, and Emergency Managers Information Network. (Respond)

Tasks: Nonprofit Organization Partners

Auxiliary Communications (AUXCOMM)

1. Coordinate with ESF 2 – Communications to assist MPSC in efforts to aid the energy industry in providing new services or to restore existing services that are assigned Telecommunications Service Priority (TSP) restoration priorities. (Respond)
2. Assess damage to telecommunications identified by MPSC as essential for energy system restoration (e.g., electrical service priorities). (Respond)

Public Private Partnership (P3)

1. Providing information, in cooperation with local, state, tribal, and territorial, governments and energy industry officials, on energy supply and demand conditions, as well as the requirements for and the availability of materials and services critical to energy supply systems (e.g., outages, restoration status, energy infrastructure status). (Respond)

Additional Sources:

Representative Gibbons, Sam. "Natural Gas Policy Act." Pub 9 Nov. 1978. *Congress.gov*. https://www.congress.gov/bill/95th-congress/house-bill/5289. Accessed 11 April 2022.

Representative Hastings, James. "Energy Supply and Environmental Coordination Act of 1974." Pub. 22 June 1974, *Congress.gov*. https://www.congress.gov/bill/93rd-congress/house-bill/14368. Accessed 11 April 2022.

Representative Holifield, Chet. "Federal Energy Administration Act." Pub. 7 May 1974. *Congress.gov*. https://www.congress.gov/bill/93rd-congress/house-bill/11793. Accessed 11 April 2022.

Representative Thomberry, Mac. "Department of Energy (DOE) Organization Act." Pub. 24 June 1999, *Congress.gov*. https://www.congress.gov/bill/106th-congress/house-bill/2032?q=%7B%22search%22%3A%5B%22%5C%22DOE+Organization+Act%5C%22%22%2C%22%5C%22DOE%22%2C%22Organization%22%2C%22Act%5C%22%22%5D%7D&s=2&r=2. Accessed 11 April 2022.

Senator Jackson, Henry. "Energy Policy and Conservation Act." Pub. 22 Dec. 1975. *Congress.gov*. https://www.congress.gov/bill/94th-congress/senate-bill/622. Accessed 11 April 2022.

United States Congress, 66th. "Federal Power Act." Pub. 10 June 1920, Amended 18 Dec. 2018. *Energy.gov*. https://www.energy.gov/sites/prod/files/2019/10/f67/Federal%20Power%20Act_2019_508_0.pdf. Accessed 11 April 2022.

United States Congress, 84th. "Defense Production Act of 1950." Pub 29 June 1956. *Congress.gov*. https://www.congress.gov/bill/84th-congress/house-bill/9852/all-info. Accessed 11 April 2022.

ESF 13: PUBLIC SAFETY AND SECURITY

Definition/Purpose: The purpose of ESF 13 is to provide State public safety and security assistance to local, tribal, and state organizations overwhelmed by the results of an actual or anticipated natural or manmade disaster, or an act of terrorism.

Scope: Activities in this ESF support the safety and security mission of local, tribal, and state partners. Primary functional responsibilities in ESF 13 include:

- Supporting law enforcement agencies and partners in Michigan that are overwhelmed and unable to fulfill their public safety and security missions.
- Providing equipment for law enforcement activities.

Core Capabilities: On-Scene security, protection, and law enforcement

Lifelines: All ESFs intersect with various Lifelines depending upon the incident. ESF 13 supports multiple Lifelines, however the Lifeline most impacted by ESF 13 is the Safety and Security Lifeline.

Other ESF Overlap:
ESF 4: Firefighting – Public safety requires coordination between ESF 4 and ESF 13 due to the inherent danger to human life and property posed by fire.
ESF 9: Search and Rescue – The safety and security of individuals who are lost and/or in need of rescue requires coordination between ESF 9 and ESF 13. These two ESFs are often led by the same agency in disaster response.

Other Plans and Annexes:
All Disaster-specific Annexes – ESF 13 may be involved in any disaster-specific annex incident if there is a need to support the law enforcement to secure the safety and security of those affected by the incident.

Disaster-specific Annex: Civil Disturbances – In incidents of civil disturbances ESF 13 will likely be requested to provide law enforcement support to the impacted areas to ensure the safety of populations in and around the area.

Disaster-specific Annex: Nuclear Attack (Military) – In a nuclear attack incident, there will likely be a need for law enforcement personnel and equipment to secure the safety of the affected populations.

Disaster-specific Annex: CBRNE Attack (Terrorism) – ESF 13 activities support local law enforcement actions for the safety and security of the population. The FBI and other federal partners may request the assistance of ESF 13 following a terrorism, but ESF 13 is not synonymous with terrorism response.

Other Areas of Interest:
ESF 13, does not take the lead in a terrorist incident; ESF 13 supports local law enforcement actions for the safety and security of residents and visitors.

The State Director of Emergency Management and Homeland Security (SDEMHS) may appoint a senior law enforcement official during an incident requiring additional coordination of all federal law enforcement, public safety, and security operations with intelligence or investigative law enforcement operations.

Tasks: Lead Agency
Michigan State Police (MSP)

1. The MSP SEMC is the ESF 13 coordinator unless otherwise designated. (Respond)
2. The Senior Law Enforcement Official (SLEO) is often designated from this office by MDAG or SDEMHS. (Respond)
    a. The SLEO or Director of the MSP oversees the activities of state law enforcement officers deployed as a result of this annex.
    b. The SLEO, Director of MSP or designee serves as a member of the Unified Coordination Group (UCG) and is responsible for ensuring that law enforcement requirements and resources are allocated in coordination with appropriate ESF 13 group members.
3. Coordinate all ESF 13 activities at the state level and across all 8 MSP Regions. (Respond)
4. Mobilize and deploy ESF 13 field resources to the affected areas to accomplish public safety and security situational assessment and awareness. (Respond)
5. Activate an Incident Command Post (ICP) as needed and coordinated through ESF 13. Deploy liaison personnel to staff appropriate facilities including but not limited to the SEOC, affected EOCs, ICPs, and MSP posts during activations. (Respond)

6. Manage the Special Deputation Program to provide expanded state law enforcement authority to state law enforcement officers assisting in the ESF 13 response when required. (Respond)
    a. Law enforcement officers from other states may require deputation to respond appropriately in the State of Michigan.
    b. Federal law enforcement officers do not require deputation to respond in the State of Michigan.
7. Control access to the disaster area based upon the Official Order 3 Authority. (Respond)
8. Coordinate with the transportation industry through the CVED and MDOT for additional resources to support emergency operations. (Respond)
9. Provide specialized resources to support emergency operations. (Respond)
    a. Canine Unit
        i. Provide technical expertise in search and rescue site management.
        ii. Utilize tracking dogs for various types of scents including but not limited to locating missing or lost persons, locating deceased persons, locating cadavers underwater, and bomb detection.
    b. Marine Services Team Underwater
        i. Perform search and recovery operations.
        ii. Utilize a sonar and side scan sonar for locating submerged objects and bodies.
        iii. May, in a limited capacity, respond as a rescue unit for survivors trapped with an air supply.
        iv. Perform body recovery.
        v. Perform radiological detection related to shipping.
    c. Emergency Support Team
        i. Provide assistance with rescue operations.
        ii. Has necessary equipment and training for most types of rescue situations, including but not limited to climbing and rappelling gear and individual communications systems.
        iii. Act as primary MSP response unit for hostile paramilitary action, hostage negotiations, other high-risk situations.
    d. Aviation Unit
        i. May provide aircraft transportation for MSP personnel and other state government officials upon receipt of authorization.
        ii. Collect aerial imagery (photographs and video) of a disaster area and to monitor vehicle traffic flow in incidents requiring evacuation. This can be done utilizing UAS capabilities and may include a video downlink capability for incident commander.
        iii. The MSP aircraft can assist in search and rescue operations while working in conjunction with MSP and other law enforcement personnel.
        iv. Aircrafts outfitted with Bambii Buckets may drop water on fires.
        v. This unit does not perform air rescue operations.
    e. Forensic Science Division
        i. Provide laboratory analysis of substances or evidence through the MSP regional forensic laboratories.
        ii. Support local authorities in managing a mass fatality incident scene including securing evidence and identifying victims in the aftermath of a mass fatality incident.
    f. Fire Investigators
        i. Assist local governments in the investigation of structural fires.
    g. Bomb Squad
        i. Respond when a bomb threat has been received or a bomb is suspected and may be activated for removal and destruction of the explosive material.
        ii. The bomb squad utilizes robots that may be requested for alternate use including but not limited to Search and Rescue operations.
10. Enforce the Governor's emergency authorities. (Respond)
11. Assist in evacuating areas, controlling traffic, and providing security in the affected area. (Respond)
12. The Director of State Police maintains a cadre of trained individuals to serve as the SEMC when appropriate. (All)
13. SEMC participates in meetings as designated, including but not limited to the State Emergency Management Coordinators Quarterly Meetings. (All)

Tasks: State Government Support Agencies

Governor's Office

1. Control access to the disaster area. (Respond)
2. Direct other actions deemed appropriate to protect life and property. (Respond)

Department of Attorney General (MDAG)

1. The Michigan Department of Attorney General (MDAG) or the State Director of Emergency Management and Homeland Security (SDEMHS) may appoint a Senior Law Enforcement Official (most likely from MSP) during an incident requiring additional coordination of all Federal law enforcement, public safety, and security operations with intelligence or investigative law enforcement operations directly related to the incident. (Respond)
2. Assist in the state and regional coordination functions of ESF 13 and participate in the ESF 13 Stakeholder Committee and Advisory Board. (Respond)
3. Provide general and specialized resources to assist in the ESF 13 response. (Respond)
4. Coordinate ESF 13 liaisons with Federally recognized Native Indian tribes. (Respond)

Department of Corrections (MDOC)

1. Staff state and local staging areas to coordinate the reception and assignment of ESF 13 resources to their missions. (Prevent)
2. Assist in the state and regional coordination functions of ESF 13 and participate in the ESF 13 Stakeholder Committee and Advisory Board. (Prevent)
3. Protect prisoners, staff, and visitors in state correctional facilities. (Protect)
4. Support law enforcement activities. (Respond)
5. Provide resources to support emergency operations. (Respond)
6. Provide general and specialized resources to assist in the ESF 13 response. (Respond)
7. Provide state Corrections Officers to assist state and local departments of corrections during ESF 13 responses. (Respond)
8. Coordinate the assessment, repair, and restoration of damaged state correctional facilities. (Public Works and Engineering) (Recover)

Department of Education (MDE)

1. Protect residents, staff, and visitors at the Michigan School for the Deaf. (Public Safety) (Protect)

Department of Health and Human Services (MDHHS) – Human Services

1. Coordinate with MSP to serve as the state's resource on the issues of missing and sexually exploited children (See ESF 6: MSP). (Protect)
2. Provide information and resources to law enforcement, parents, guardians, children (including child victims), and other professionals. (Protect)
3. Reunite children with their parents and/or guardians through the following activities: Establish a toll-free hotline, as well as teletypewriter (TTY) and video relay service (VRS) lines to receive reports of displaced children; create a website that is compliant with Section 508 to provide information about displaced children; deploy staff to the location of the declared disaster event to gather information about displaced children. Provide information to the public about additional resources. Partner with local, state, tribal, territorial, insular area, and Federal law enforcement agencies. Refer reports of displaced adults to the Attorney General's designated authority and the National Emergency Family Registry and Locator System. (Protect)
4. Identify access control issues relative to the continued operation of the Michigan Career and Technical Institute. (All)

Department of Military and Veteran Affairs (DMVA)

1. Protect patients/residents, staff, and visitors at the Jacobetti and Grand Rapids Homes for Veterans. (Public Safety) (Protect)
    a. Provide general security and area, point, route, and critical infrastructure protection.
2. May provide security support by: (Respond)
    a. Provide organized, trained, and equipped military force capable of supporting civilian law enforcement agencies to maintain law and order, including lethal and non-lethal capability.
    b. Provide a general security, area, point, route, and critical infrastructure protection (CIP).
    c. Provide a military force capable of conducting security operations and providing deterrence by presenting a viable military presence.
    d. Assist civilian law enforcement agencies to maintain law and order (e.g., controlling crime and detaining persons that have committed crimes, controlling looting, vandalism, arson, and disturbances, enforcing curfews, and providing non-lethal deterrence by presenting a viable military presence, i.e., "show of force").
    e. Protect firefighters, emergency medical personnel, and other first responders.
    f. Provide reconnaissance and situation intelligence
3. Coordinate or provide military support to civil authorities. (Respond)
4. Protect patients/residents, staff, and visitors at the Jacobetti and Grand Rapids Homes for Veterans. (Respond)
5. Facilitate Security Support Task Assignments. (Respond)

    a. Provide organized, trained, and equipped military forces capable of supporting civilian law enforcement agencies in maintain law and order, including non-lethal capability.
    b. Provide a general security, area, point, route, and critical infrastructure protection (CIP).
    c. Provide a military force capable of conducting security operations and providing deterrence by presenting a viable military presence.
6. Coordinate/ provide military support to civil authorities. (Respond)
7. Security Support Task Assignments (Respond)
    a. Assist civilian law enforcement agencies in maintain law and order (e.g., controlling crime and detaining persons that have committed crimes, controlling looting, vandalism, arson, and disturbances, enforcing curfews, and providing non-lethal deterrence by presenting a viable military presence, i.e., "show of force").
    b. Protect firefighters, emergency medical personnel, and other first responders.
    c. Provide reconnaissance and situation intelligence.

Department of Natural Resources (MDNR)

1. Assist in the state and regional coordination functions of ESF 13 and Participate in the ESF 13 Stakeholder Committee and Advisory Board. (Prevent)
2. Provide security support at shelters. (Resource Support) (Protect)
3. Protect visitors at state parks and recreation areas. (Public Safety) (Protect)
4. Provide general and specialized resources to assist in the ESF 13 response. (Respond)
5. Provide state law enforcement resources to support an ESF 13 response through its member departments and agencies. (Respond)
6. Assist in staffing the Field Support Teams if required. (Respond)
7. Support law enforcing activities. (Respond)

Department of State (MDOS)

1. Assist in the state and regional coordination functions of ESF 13 and Participate in the ESF 13 Stakeholder Committee and Advisory Board. (Respond)
2. Provide general and specialized resources to assist in the ESF 13 response. (Respond)

MSP - Emergency Management Homeland Security Division (EMHSD)

1. The Michigan Department of Attorney General (MDAG) or the State Director of Homeland Security (SDHS) may appoint a Senior Law Enforcement Official (most likely from MSP) during an incident requiring additional coordination of all Federal law enforcement, public safety, and security operations with intelligence or investigative law enforcement operations directly related to the incident. (Respond)
2. Assist in the state and regional coordination functions of ESF 13 and Participate in the ESF 13 Stakeholder Committee and Advisory Board. (Respond)
3. Provide general and specialized resources to assist in the ESF 13 response. (Respond)
4. Provide state law enforcement resources to support an ESF 13 response through its member departments and agencies. (Respond)
5. Assist in staffing the Field Support Teams if required. (Respond)

Department of Technology, Management, and Budget (DTMB)

1. Protect employees and visitors at DTMB owned or managed facilities. (Protect)

Department of Transportation (MDOT)

1. Assist in the state and regional coordination functions of ESF 13 and Participate in the ESF 13 Stakeholder Committee and Advisory Board. (Respond)
2. Provide general and specialized resources to assist in the ESF 13 response. (Respond)

JUDICIAL - Supreme Court (administered via SCAO)

1. Protect employees and visitors at judicial facilities. (Protect)

LEGISLATIVE – Senate/House of Representatives

1. Protect employees and visitors at legislative facilities. (Protect)

Tasks: Federal Government Support Agencies

Federal Bureau of Investigations (FBI)

1. Assist in the national and regional coordination functions of ESF 13 and Participate in the ESF 13 Stakeholder Committee and Advisory Board. (Prevent)

2. Provide general and specialized resources to assist in the ESF 13 response. (Respond)
3. Coordinate the FBI's prevention and investigative efforts with ESF 13 activities as appropriate during terrorist events. (Respond)

ESF 14: CROSS-SECTOR BUSINESS & INFRASTRUCTURE

Placeholder material; ESF 14 is not currently part of the MEMP. Below is the cover page of ESF 14 from FEMA's National Response Framework guidelines https://www.fema.gov/sites/default/files/2020-07/fema_ESF_14_Business-Infrastructure.pdf.

Emergency Support Function #14 – Cross-Sector Business and Infrastructure

ESF Coordinator:

Department of Homeland Security / Cybersecurity and Infrastructure Security Agency (CISA)

Primary Agency:

Department of Homeland Security / CISA
Department of Homeland Security / Federal Emergency Management Agency (FEMA)

Support Agencies:

Department of Agriculture
Department of Commerce
Department of Defense
Department of Energy
Department of Homeland Security
Department of Health and Human Services
Department of Housing and Urban Development
Department of Labor
Department of State
Department of Transportation
Department of the Treasury
Environmental Protection Agency
General Services Administration
Small Business Administration
U.S. Army Corps of Engineers

INTRODUCTION

Purpose

Emergency Support Function (ESF) #14 supports the coordination of cross-sector operations,[1] including stabilization of key supply chains and community lifelines, among infrastructure owners and operators, businesses,[2] and their government partners. ESF #14 is complementary to the Sector-Specific Agencies (SSA) and other ESFs and is a mechanism for entities that are not aligned to an ESF or have other means of coordination. Critical infrastructure sectors currently aligned to another ESF will continue to use that ESF as their primary interface. ESF #14 will be the primary interface for unaligned sectors, and will support coordination among all sectors.

Businesses and infrastructure owners and operators have primary responsibility for managing their systems in emergencies, and unequalled expertise to do so. ESF #14 supports growing efforts to enable collaboration among critical infrastructure sectors[3] and helps coordinate and sequence such operations to mitigate cascading failures and risks.

ESF #14 also integrates SSA incident response operations with ESFs and other relevant public-private sector coordinating entities. SSAs have critical roles, responsibilities, and authorities[4] in partnering with infrastructure owners and operators in their respective sectors. ESF #14 works with SSAs, other ESFs, and their partners to support cross-sector

ESF 15: EXTERNAL AFFAIRS

Definition/Purpose: The purpose of ESF 15 is to provide accurate, coordinated, timely, and accessible information to all affected audiences, including governments, media, the private sector, and the local populace - including children, those with disabilities and other access and functional needs, and individuals with limited English proficiency.

Scope: Activities in this ESF support the development, coordination, and delivery of messages to impacted stakeholders, including the public, decision makers, and responders. Primary functional responsibilities in ESF 15 include:

- Delivering incident preparedness, health, response, and recovery instructions to those directly affected.
- Disseminating of incident information to the public, including:
  - Children.
  - those with disabilities, access and functional needs, and vulnerable populations.
  - individuals with limited English proficiency.
- Coordinating the development and delivery of information and instructions to the public related to:
  - federal assistance in the affected area.
  - state departmental/agency response.
  - national preparedness.
  - protective measures.
  - impacts to unaffected areas.

Core Capabilities: Public Information and Warning

Lifelines: All ESFs intersect with various Lifelines dependent upon the incident.

Other ESF Overlap:
ESF 2: Communications – The ESF 2 describes the systems by which communications may be sent. Generally, communication methods described in ESF 2 can be broken into internal and external communications. External communications must tie closely with ESF 15 to distribute the appropriate message to the appropriate audience using the appropriate system. Some tasks in ESF 15 say "see ESF 2" for more details on the system operations.
ESF 5: Planning and Information – Populations with Access and Functional Needs (AFN) and disabilities, and vulnerable populations are specifically addressed in ESF 5. To be sure to communicate adequately, ESF 15 must coordinate closely with ESF 5 to ensure all populations are addressed.

Other Plans and Annexes:
All Disaster-specific Annexes – All disaster-specific annexes require coordination with ESF 15 as communicating with the public is a part of all disaster responses, regardless of cause or type.

Disaster-specific Annex: Nuclear Attack (Military) – In the case of nuclear attack, the ESF 15 becomes critical to deliver time-sensitive information for life health and safety. This may be further complicated by impacts of the attack on ESF 2 and ESF 3's infrastructure and systems for communications.
Disaster-specific Annex: CBRNE Attack (Terrorism) – Any terrorist attack containing CBRNE elements requires a coordinated ESF 15 response to ensure the public and impacted populations are informed of ongoing threats, safety information, and government responses.
Disaster-specific Annex: Nuclear Power Plant Incident – Nuclear power plant incidents include ESF 15 in all pre-incident planning and response to ensure the public is aware of message meaning and channels, thereby expediting impacted populations' response.

Other Areas of Interest:
The Joint Information Center (JIC) is generally the facility which most ESF 15 operations are coordinated from. The Joint Information System (JIS) which includes the coordination and cooperation of various state agencies and involved partners to ensure one coordinated and comprehensive message, is the main system by which ESF 15 operates. Both the JIC and JIS are generally operated by the EMHSD, though they are "owned" by the Governor's Office. The Public Information Officers (PIOs) of various state agencies, private sector partners, and Non-Governmental Organizations (NGO) partners work collaboratively to ensure a unified message reaches all audiences. Often the PIOs of these stakeholders are coordinated by the EMHSD PIO.

Tasks: All Agencies

1. Provide critical disaster relief and preparedness information to the public through proactive media. (Prevent)

Tasks: Lead Agency

MSP – Emergency Management and Homeland Security Division (EMHSD)

1. Disseminate public health information on protective actions related to exposure to health threats or environmental threats. (Prevent)
2. The EMHSD PIO acts as the State Public Information Officer (SPIO): (Respond)
    a. Acts as principal point of contact at the state level for news media.
    b. Coordinate the release of state-level public information.
    c. Establish and coordinate a system for information inquiries.
    d. Coordinate and facilitate the JIS, however the Governor's PIO may assume this task.
    e. Organize and coordinate the public information function in the SEOC.
    f. May request the presence of SMEs at the SEOC.
    g. Establish a process for the approval of messaging.
    h. Establish the appropriate timeframe for public information submittal; information submitted may be coordinated with ESF 5 for Situation Reports and other informational documents.
    i. Establish a backup submittal method for public information for approval via in person approval by PIO.
3. Operate the JIC. (Respond)
    a. May request the presence of SMEs at the JIC.
    b. May establish a physical or virtual JIC. (Coordinate with ESF 7 to establish a physical JIC).
4. Execute the JIS Plan, including the establishment of the JIS. (Respond)
    a. Monitor the media to obtain new information and address it appropriately.
    b. Recover information through various means and respond to information inquiries and requests.
    c. Notify partners of JIS activation.
    d. Establish a schedule for JIS and JIC activities.
5. Maintain liaison with affected local jurisdictions through District Coordinators, MI CIMS, and other systems. (Respond)
6. Utilize the following systems in the SEOC for disseminating warning or emergency information to emergency facilities and personnel, and residents: NAWAS, IPAWS, Telephone, MI CIMS, Web/Social Media Sites, and Gov Delivery(email). (See ESF 2 for more information on these systems). (Respond)
7. In an actual or potential incident, the NICCL, SICCL, or PICCL are used to communicate pertinent preparedness or response information to federal partners, state and federal partners, and critical infrastructure partners respectively. (See ESF 2 for more information on the NICCL, SICCL, and PICCL.) (Respond)
8. Utilize the FEMA National Radio System if normal communications are lost or degraded to communicate between FEMA and the local, state, tribal, and federal partners. (Respond)
9. Maintain and leverage the following communications systems in the SEOC to provide for direction and control of disaster relief personnel, and to receive and disseminate emergency information. (Respond)
    a. Email, facsimile, MI CIMS, Cellular Telephone, Michigan Public Safety Communication System Radio, Telephone, Satellite Telephone, IPAWS, and Auxiliary communications (AUXCOMM).
    b. External communications: internet (website, social media, email) print, IPAWS and facsimile.
10. Communicate public information through available systems, including those listed above. Information may be elevated to the federal government through existing systems. (Respond)
11. The EMHSD PIO may assist in preparing the Governor's emergency, disaster, or heightened state of alert declaration. (Respond)
12. The EMHSD PIO may assist in preparing the Governor's request for Presidential emergency or major disaster declaration. (Respond)
13. Coordinate with the Michigan Association of Broadcasters (MAB) to encourage local media partnerships. (All)

Tasks: State Government Support Agencies

Governor's Office

1. Create and disseminate messaging regarding declarations of a "state of emergency", "state of disaster", or "heightened state of alert". (Respond)
2. Authorize and control the release of public information. (All)

Michigan Department of Agriculture and Rural Development (MDARD)

1. Coordinate communication to the food and agriculture sector, including farming, food processing, distribution and retail, livestock and companion animal health issues and other matters with the following communication methods: (Respond)
    a. Library of public information materials and pre-scripted messages on all hazards.
    b. Public health emergency information.
    c. Outreach tools.
2. Issue agricultural advisories, including quarantines, embargoes, and orders. (Respond)

3. Provide information on recovery for farms, food businesses and other impacted entities. (Recover)

Department of Civil Rights (MDCR)

1. Provide guidance to the SEOC regarding specific communication needs for various partners and communities. (Respond)
2. Use appropriate auxiliary aids and services necessary for effective communication with individuals with disabilities and meaningful access to limited English proficient persons, under applicable state and federal laws, rules, and regulations. (Respond)
3. Quell rumors, explains ambiguous causes and effects, and avoids media complications. (Respond)
4. Conduct civil rights investigations and compliance reviews based upon potential or reported need for communication clarity. (All)
5. Enforce, through the revocation of licenses, fines, injunction activities, order actions, and damages, state civil rights laws, including their application to emergency management generally. (All)
6. Serve as a conduit for community-based organizations to determine on-the ground truths. (All)
7. Seek specialized information regarding the conditions of at-risk, underserved, or marginalized communities. (All)
8. Work with ethnic commissions. (All)

Department of Environment, Great Lakes, and Energy (EGLE)

1. Use the National Response Team (NRT) JIC model to communicate with affected publics during oil discharges and hazardous materials releases. NRT JIC operations and ESF 15 align functions and communications efforts. (Respond)

Department of Health and Human Services (MDHHS) – Health

1. Coordinate the state public health communication response with the following communication methods: (Respond)
    a. Library of public information materials and pre-scripted messages on all hazards.
    b. Public health emergency information.
    c. Outreach tools.
2. MDHHS, its agencies and partners working under ESF 8, educate and inform the public, health care professionals, policymakers, partner organizations, and the media in a timely, accurate, and coordinated way during the response phase of a public health and medical incident. MDHHS and EMHSD work together as the respective leads for ESF 8 and ESF 15 during a public health emergency. (Respond)
3. Coordinate the state public health communication response. (Respond)
4. Issue health advisories and protective action guides to the public. (Respond)
5. Address bilingual needs. (Respond)
6. Assist in arranging interpreters/translators for non-English speakers in a disaster. (Respond)
7. Maintain the Michigan Health Alert Network (MIHAN). (All)

MDHHS - Aging and Adult Services Agency (AASA)

1. Maintain liaison with local government and volunteer human service agencies. (All)

Department of Licensing and Regulatory Affairs (LARA)

1. Provide interpreter services, as required. (All)

Department of State (MDOS)

1. Serve, in conjunction with the Governor's Office Communications, as the state lead for delivering communications pertaining to a domestic incident to international/interstate partners. (Respond)

Michigan State Police (MSP)

1. Lead state communications about the investigation if an incident is deemed to be terrorist-related. (Respond)

MSP - Michigan Intelligence Operations Center (MIOC)

1. Utilize the following systems for disseminating warning or emergency information on potential or imminent terrorism threats: (Respond)
    a. LEIN.
    b. Telephone.
    c. Email.
    d. Web/Social Media Sites.
    e. Hardcopy.
    f. Homeland Security Information Network (HSIN).

Department of Technology, Management, and Budget (DTMB)

1. Post all disaster response and recovery information to the SOM web site and appropriate social media outlets at the direction of the JIC. (All)
2. Maintain specific SOM websites. (All)

JUDICIAL - Supreme Court (administered via SCAO)

1. Serve as information conduits. (Respond)
2. Issues opinions and orders regarding civil and criminal cases or controversies brought before the court system by applicable parties. (All)
3. Provide guidance, promulgates regulations, conduct investigations and compliance reviews, and enforces state civil rights laws, including their application to emergency management generally; and the use of appropriate auxiliary aids and services necessary for effective communication with individuals with disabilities and meaningful access to limited English proficient persons, such as the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and the Civil Rights Act of 1964. (All)

Tasks: Federal Government Support Agencies

National Weather Service (NWS)

1. Broadcast National Weather Service warnings, watches, forecasts on the National Weather Radio (NWR) (See ESF 2 for more information on NWR). (Respond)
2. May broadcast additional incident-related warnings, and post-event information on the NWR at the request of the SEOC or local EOC. (Respond)
3. May update official social media platforms to the public with information coordinated through the JIS and SEOC. (Respond)
4. NWR is a nationwide network of radio stations broadcasting continuous weather information direct from a nearby National Weather Service (NWS) office. NWR broadcasts NWS warnings, watches, forecasts, and other hazard information 24 hours a day. In conjunction with the Emergency Alert System (EAS), NWR provides an all-hazards radio network, making it a single source for comprehensive weather and emergency information. The Secretary of Homeland Security can use the NWR network to send target alerts anywhere in the country. In addition, this type of activation also activates DHS/FEMA's EAS network at the local level. NWR also broadcasts warning and post-event information for all types of hazards, including natural (e.g., earthquakes and volcano activity), manmade (e.g., chemical or environmental incidents), and terrorism-related hazards. (All)

United States Department of Homeland Security (DHS)

1. Coordinate Federal incident communications using a domestic communications strategy following an actual or potential terrorist threat or incident: (All)
    a. National Terrorism and Advisory System (NTAS): Communicates information about terrorist threats by providing timely, detailed information to the public, government agencies, first responders, airports, and other transportation hubs, as well as the private sector. It recognizes that Americans all share responsibility for the Nation's security and should always be aware of the heightened risk of a terrorist attack in the United States and of what they should do. After reviewing the available information, the Secretary of Homeland Security will decide in coordination with other Federal entities whether an NTAS alert should be issued. National Terrorism and Advisory System (NTAS) will be conducted within the guidelines listed in the National Prevention Framework.
    b. Federal Interagency NTAS Coordination: The White House Office of Communications, supported by DHS Public Affairs, will immediately assess the requirement for a public announcement with appropriate senior Federal counterterrorism communicators. Recommendations will be coordinated with the National Security Staff and the DHS Counter Terrorism Advisory Board, which makes a formal recommendation to the Secretary of Homeland Security about releasing an NTAS alert. Announcement of an NTAS alert will be conducted within the scope of the overall Federal communications strategy as directed by White House Office of Communications.
2. The following systems are used for any type of actual or potential incident to communicate pertinent preparedness or response information: (All)
    a. National Incident Communications Conference Line (NICCL): A standing conference line designated, maintained, and supported by DHS Public Affairs as the primary means for interagency incident communications information sharing during an incident requiring Federal coordination.
    b. State Incident Communications Conference Line (SICCL): A dedicated Federal-state incident communications conference line.
    c. Private Sector Incident Communications Conference Line (PICCL): A standing line to provide timely information to critical infrastructure communicators.

3. These systems disseminate warnings and emergency information to the SEOC and other Michigan emergency facilities and personnel: (Warning and Communications) (All)
    a. National Attack Warning and Alert System (NAWAS).
    b. National Weather Wire Service (NWWS).
    c. FEMA National Alert Radio System (FNARS).
    d. Telephone.
    e. Secure Communications.

Tasks: Nonprofit Organization Partners

American Red Cross (ARC)

1. Provide staff to the JIC, as requested. (Respond)
2. Coordinate disaster messaging with State communicators and provide critical disaster relief and preparedness information to the public through proactive media outreach, its website (http://www.redcross.org), and social media platforms. (All)

Local Governments

1. Utilize the following systems for disseminating warning or emergency information to emergency facilities and personnel, and residents: (Respond)
    a. NAWAS.
    b. EAS.
    c. Mass Notification Systems.
    d. Public Warning Sirens/Devices.
    e. Telephone/Alert Monitor.
    f. MI CIMS.
2. Collaborate with SEOC to identify areas or populations with additional needs. (All)
3. Ensure advocacy and action at the local level in all mission areas, through partnerships with local houses of worship, schools, community centers, media, etc. (All)
4. Advocacy may originate from populations with AFN or other disabilities, vulnerable populations, and specialized "parental positions" such as nurses and caretakers in assisted living facilities. (All)

Additional Sources:

**Elliott-Larsen Civil Rights Act, Persons with Disabilities Civil Rights Act, the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act, and the Civil Rights Act of 1964.

DISASTER SPECIFIC ANNEXES

DISASTER-SPECIFIC ANNEXES

The disaster-specific annexes included in this plan address specific situations and task assignments unique to some of the high-risk hazards that may affect Michigan. These annexes build upon the tasks and assignments already identified in the ESF's and may provide additional situational awareness and contextual information regarding the specific hazard. The disaster-specific annexes included in the MEMP are based upon the threats and hazards analyzed in the Michigan Hazard Analysis (MHA) and identified as a top or high priority hazard. Not all of the top or high priority hazards may have an annex, as some of hazards' tasks are included in or covered by the tasks identified in the ESF's already or have their own standalone plans. For a list of Michigan's Estimated Hazards Rankings see Figure 1 in the Situation and Assumptions section of the Basic Plan.

Each disaster-specific annex includes a description of the type of disaster or incident, the scope of the type of disaster, the method by which the State is notified of the incident, the method and type of assessment performed by the state regarding that incident, and a description of the general response activities the state may perform. If there are other plans, annexes, or relevant documents those may also be listed for reference. Specific tasks assigned to state, federal, and non-profit agencies are also delineated in each annex. In the MHA, hazards are grouped into natural, technological, human-related, and weapons of mass destruction attack disaster types. The disaster-specific annexes note which disaster type they fall into.

DISASTER SPECIFIC ANNEXES IN ORDER

CHEMICAL BIOLOGICAL RADIOLOGICAL NUCLEAR EXPLOSIVE (CBRNE) ATTACK (TERRORISM) – WEAPONS OF MASS DESTRUCTION ATTACKS	168
CIVIL DISTURBANCES – HUMAN-RELATED DISASTER	221
CYBERATTACKS – HUMAN-RELATED DISASTER	223
DROUGHT – NATURAL DISASTER	227
EARTHQUAKES – NATURAL DISASTER	229
ENERGY EMERGENCY – TECHNOLOGICAL DISASTER	231
EXTREME TEMPERATURES – NATURAL DISASTER	234
FLOODING – NATURAL DISASTER	236
HAZARDOUS MATERIAL INCIDENTS –TECHNOLOGICAL DISASTER	239
INSECT INFESTATION – NATURAL DISASTER	249
LARGE FIRES – TECHNOLOGIC DISASTER	251
NUCLEAR ATTACK (MILITARY)– WEAPONS OF MASS DESTRUCTION ATTACKS	254
NUCLEAR POWER PLANT INCIDENT – TECHNOLOGICAL DISASTER	268
OIL AND GAS WELL/PIPELINE ACCIDENTS – TECHNOLOGIC DISASTER	301
PASSENGER TRANSPORTATION ACCIDENTS –TECHNOLOGIC DISASTER	302
PUBLIC HEALTH EMERGENCIES – HUMAN-RELATED DISASTER	303
ESSENTIAL RESOURCE SHORTAGES – HUMAN-RELATED DISASTER	305
SEVERE STORMS (HIGH WIND) – NATURAL DISASTER	308
SUBSIDENCE –NATURAL DISASTER	309
WIDESPREAD PLANT OR ANIMAL DISEASE – NATURAL DISASTER	310

Please note that the ‘invasive species’ hazard (Figure 1) may fall under either the ‘insect infestation’ or ‘widespread plant or animal disease’ disaster-specific annexes; the ‘infrastructure failure’ hazard may fall under various disaster-specific annexes including the ‘cyber attacks’, ‘energy emergencies’, ‘oil and gas well/ pipeline accidents’, ‘passenger transportation accidents’, and other disaster-specific annexes; the ‘catastrophic incidents’ hazard tasks are already identified in the ESF’s; ‘hazardous materials incident (site)’, and ‘hazardous materials transportation’ hazards are both addressed in the ‘hazardous materials incidents’ disaster-specific annex; ‘hail’, ‘extreme cold’, ‘snowstorms’, ‘ice storms’, ‘fog’, ‘severe winds’, ‘tornadoes’, and ‘extreme heat’ hazards are all addressed in the ‘severe storms/tornadoes/ severe winter weather/ extreme heat’ disaster-specific annex; ‘wildfires’, ‘scrap tire fires’, and ‘major fires or industrial incidents’ hazards are all addressed in the ‘large fires’ disaster-specific annex; ‘dam failures’ and ‘great lakes shorelines hazards’ are addressed under a number of disaster-specific annexes including the ‘flooding’ annex, and the ‘subsidence’ annex; ‘nuclear power plant accidents’ hazards are addressed in the ‘nuclear attack (military)’ disaster-specific annex and in the various nuclear power plant response plans.

In addition to these disaster-specific annexes, the *Michigan Repatriation Plan (Publication 111)* and the *Michigan Satellite Reentry Response and Recovery Plan (Publication 115)* are stand-alone support plans which address the identified hazards of ‘emergency repatriation’, ‘space weather’, and ‘celestial impacts.’

CHEMICAL BIOLOGICAL RADIOLOGICAL NUCLEAR EXPLOSIVE (CBRNE) ATTACK (TERRORISM) – WEAPONS OF MASS DESTRUCTION ATTACKS

NOTE: In the 2022 update of the MEMP, the Chemical Biological Radiological Nuclear Explosive (CBRNE) annex is not being updated due the recent (December 2021) updating of Radiological Emergency Preparedness requirements from the federal government. The tasks, descriptions, and other information in this annex are directly repeated from the 2018 version of the MEMP.

Nature of the Hazard. The complexity, scope and potential consequences of a terrorist attack require a rapid and decisive capability to resolve the situation. An extraordinary level of coordination between **crisis and consequence management** functions (see "Crisis Management and Consequence Management" section) across all levels of government is of paramount importance as no single local, state, or federal department / agency has the capabilities or authorities necessary to mount an effective response to a well-executed WMD attack–especially one that produces mass casualties.

Differences between Terrorist Weapon of Mass Destruction (WMD) Attacks and Other Disasters. Several characteristics of WMD terrorist events which are markedly different from other types of emergencies or disasters include:

A terrorist incident may occur with little, or no warning and it may not be recognizable until there are multiple casualties. It may also appear to be a naturally occurring or inadvertent introduction of a disease or contaminant. Most chemical and biological agents are not detectable by methods used for explosives and firearms and many agents can be carried in containers that look like ordinary items.

There may be multiple and nearly simultaneous events, for the purpose of increasing the systemic effect (of communications, transportation, pipelines, etc.) to escalate fear and panic amongst the public or initiating one event in an attempt to influence another event's outcome.

Responders are placed at a higher risk of becoming casualties because many agents are not readily detectable or identifiable. Emergency responders may also be targets for secondary releases or explosives.

The location of the incident will be treated as a crime scene. As such, preservation and collection of evidence is critical for apprehending the terrorists and bringing them to justice. However, evacuating and treating survivors of the attack and preservation of human life is the primary concern. Therefore, it is important for the Incident Commander/Unified Command to coordinate response operations to minimize potential disruptions between law enforcement operations focused on the crime scene and other operations focused on a hazardous materials or disaster scene.

Contamination of critical facilities and large geographic areas may result. Survivors may carry an agent unknowingly to public transportation facilities, businesses, residences, medical offices and clinics, or hospital emergency rooms because they are unaware that they are contaminated/infected. First responders may carry the agent to fire stations or police precinct houses, hospitals, or to the location of future calls.

The scope of the incident may expand geometrically and may affect mutual aid jurisdictions. Airborne agents flow with the air currents which may carry them far from the initial source. Facilities may be targeted, and agents disseminated via insertion into air ventilation systems. In the case of communicable disease agents, the disease may pass from a single individual to large numbers of others, who in turn infect many others, and so on.

There will be a stronger reaction from the public than with other types of incidents. The thought of the potential of being exposed to a chemical, biological or radiological agent that is not detectable by the human senses evokes terror in most people. The fear of the unknown, and because this was an intentional attack perpetrated by terrorists rather than a random act of nature, also makes the public's response more severe.

Time is working against responding elements. The incident can expand geometrically and very quickly. Additionally, the effects of some chemical and biological agent attacks worsen over time due to the spread and absorption of contamination. Support facilities and systems, such as utilities (e.g., power generation, electrical grid, gas pipelines, etc.), 911 centers, hospitals, and other critical infrastructures are at risk as targets.

Specialized state and local response capabilities could quickly be overwhelmed.

Weapon of Mass Destruction (WMD) Defined. "(1) Any explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than four ounces, or missile having an explosive or incendiary charge of more than

one-quarter ounce, or mine or similar device; (2) any weapon that is designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals or their precursors; (3) any weapon involving a disease organism; or (4) any weapon that is designed to release radiation or radioactivity at a level dangerous to human life." (Title 18, U.S.C. § 2332a)

Potential WMD Agents. At least two important considerations distinguish WMD hazards from other types of terrorist tools, such as kidnappings and firearms. First, in the case of chemical, biological, and radiological agents, their presence may not be immediately obvious, making it difficult to determine when and where they have been released, who has been exposed, and what danger is present for first responders and health care providers. Second, although there is a sizable body of research on battlefield exposures to WMD agents, there is limited scientific understanding of how these agents affect civilian populations.

CHEMICAL AGENTS A wide variety of toxic chemical materials could potentially be used by terrorists to achieve the desired casualty and/or contamination effect(s). Literally hundreds of toxic industrial materials are produced, stored, transported, and used in various manufacturing operations throughout the country and the state. Additionally, highly toxic chemical agents produced by countries that have chemical weapons programs have been known to find their way into terrorist hands. This situation is compounded by 1) the proliferation of chemical weapons technologies, 2) the expanded number of countries that have pharmaceutical, pesticide, and industrial chemical production capacities, and 3) a growing trend for terrorists to pursue such weapons to attain their goals of producing mass casualties, spreading fear and panic, and inflicting economic devastation. (A compendium of toxic chemical warfare agents thought to be sought by terrorists is attached as **TAB A**–"Chemical Agents–Physical Properties and Toxicities" and **TAB B**–"Physiological Effects of Chemical Agents".)

BIOLOGICAL AGENTS Biological agents are pathogens (disease producing microorganisms) or their derivatives (i.e., toxins) that can be used as weapons to cause incapacitation or death in humans, animals, plants, or to cause the deterioration of materials.

Although use of conventional weapons such as explosives or firearms is still considered the most likely means by which terrorists could harm civilians, there is an increasing risk and probability for the use of biological agents. Use of biological agents as small- and large-scale weapons has been actively explored by many nations and terrorist groups. Although small-scale bio-terrorism events may actually be more likely as they would be less complex to carry out, public health agencies must prepare for possible large-scale incidents that could yield catastrophic public health consequences. Potential biological agents were selected and prioritized by the U.S. Centers for Disease Control and Prevention (CDC) based upon the likelihood of their use and the probability that their use could result in an overwhelming adverse impact on public health. (**TAB C**–"Medical Characteristics of Biological Agents" is a matrix depicting technical information pertaining to the Category A and Category B agents described in the following paragraphs.)

Category A Diseases / Agents. The U.S. public health system and primary healthcare providers must be prepared to address various biological agents, including pathogens that are rarely seen in the United States. The highest priority agents that are included in this category are those that pose a risk to national security because they can be easily disseminated or transmitted from person to person, result in high mortality rates, have the potential for major public health impact, might cause public panic and social disruption, and require special action for public health preparedness. Such agents include: Anthrax (bacillus anthracis), Botulism (clostridium botulinum toxin), Plague (yersinia pestis), Smallpox (variola major), Tularemia (francisella tularensis), viral hemorrhagic fevers (filoviruses – e.g., Ebola, Marburg, and arenaviruses – e.g., Lassa, Machupo)

Category B Diseases / Agents. The second highest priority agent group includes those that are moderately easy to disseminate, result in moderate morbidity rates and low mortality rates, and require specific enhancements of CDC's diagnostic capacity and enhanced disease surveillance. Such agents include: Brucellosis (brucella species), Epsilon toxin of Clostridium perfringens, food safety threats (e.g., salmonella species, escherichia coli O157:H7, shigella), Glanders (burkholderia mallei), Melioidosis (burkholderia pseudomallei), Psittacosis (chlamydia psittaci), Q fever (coxiella burnetii), Ricin toxin from Ricinus communis (castor beans), Staphylococcal enterotoxin B, Typhus fever (rickettsia prowazekii), Viral encephalitis (alphaviruses – e.g., Venezuelan equine encephalitis, eastern equine encephalitis, western equine encephalitis), water safety threats (e.g., vibrio cholerae, cryptosporidium parvum)

Category C Diseases/Agents. The third highest priority agent group includes emerging pathogens that could be engineered for mass dissemination in the future because of availability, ease of production and dissemination, and potential for high morbidity and mortality rates and major health impact. Such agents include emerging infectious disease threats such as Nipah virus and hantavirus.

NUCLEAR/RADIOLOGICAL AGENTS The threat posed by terrorists in this area could potentially involve small-yield nuclear devices such as Improvised Nuclear Devices (IND), Atomic Demolition Munitions (ADM), or Radiological Dispersion Devices (RDD). Should an IND or ADM be used, normally the yield can be expected to be ten kilotons (equal to 10,000 tons of TNT explosive energy) or less. A weapon with this yield could produce catastrophic results – especially in a metropolitan setting. Radiological Dispersion Devices (RDD), often referred to as "dirty bombs" is a device that uses conventional explosives to disperse low-level radioactive material. The most hazardous short-term aspect of an RDD is the blast effect. The CDC has indicated that at the levels created by most probable sources, not enough radiation would be present in a dirty bomb to cause severe illness from exposure to radiation. In this regard, the intent of the terrorist would be to capitalize on the public's fear of radiation to achieve their goal of generating panic. (See **TAB D**–"Radiation Dispersion Devices (RDD) and Nuclear Weapons Effects".)

Planning Assumptions Specific to Terrorist Attacks

Michigan shares an extensive border with Canada and commercial shipping on the Great Lakes includes both U.S. and foreign flagged vessels from around the world. Accordingly, despite increased security measures, numerous portals of entry may be used by international terrorist elements to gain entry into the United States through Michigan.

As a major industrialized and agricultural state that ranks eighth nationally in terms of population, Michigan's key transportation systems, oil and gas pipelines, electric power systems, agriculture and farm products, and other commodities are of great importance to the national economy as well as to the international community and may be potential terrorist targets.

Terrorist incidents may occur at any time of day with little or no warning, may involve single or multiple geographic areas, and may result in mass casualties.

The suspected or actual involvement of terrorists adds a complicating dimension to incident management.

The response to a threat or actual incident involves FBI law enforcement and investigative activity as an integrated element.

An act of terrorism, particularly an act directed against a large population center within the United States involving nuclear, chemical, biological, or radiological materials, will have major consequences that can overwhelm local and state response capabilities and may severely challenge federal capabilities as well.

Although limited federal response elements may arrive within the first 12 hours following a WMD attack, most will not arrive and be positioned to provide required support at the scene for a period of 24 to 36 hours following initial notification.

Local and state agencies would be expected to provide an initial response in accordance with the general responsibilities prescribed in 1976 PA 390, as amended, and the specific task assignments and responsibilities identified in this plan.

In the case of a biological attack, the effect may be temporarily and geographically dispersed, with no determined or defined "incident site". Response operations may be conducted over a multi-jurisdictional, regional, or statewide area. Further, interstate support may be requested under the provisions of the Emergency Management Assistance Compact (EMAC).

A biological attack employing a contagious agent may require quarantine by federal, state, local, and tribal health officials to contain the disease outbreak.

Local, state, and federal responders will define working perimeters that overlap. Perimeters may be used by responders to control access to an affected area, to assign operational sectors among responding organizations, and to assess potential effects on the population and the environment. Control of these perimeters and response actions may be managed by different authorities, which will impede the effectiveness of the overall response if adequate coordination is not established.

If appropriate personnel protective equipment and capabilities are not available and the area is contaminated with CBRNE or other hazardous materials, it is possible that response actions into a contaminated area may be delayed until the material has dissipated to a level that is safe for emergency response personnel to operate or until appropriate personal protective equipment and capabilities arrive, whichever is sooner.

Categories of Incidents. The NRF establishes policies, procedures, and mechanisms for responding to the following different categories of incidents, any of which could be caused by a terrorist attack:

Emergency. The NRF defines an Emergency as: "Any incident, whether natural or manmade, that requires responsive action to protect life or property." Under the federal Stafford Act, an Emergency is more specifically defined as: "Any occasion, or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States."

Major Disaster. Under the Stafford Act and NRF, a Major Disaster is defined as: "Any natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought) or, regardless of cause, any fire, flood, or explosion in any part of the United States that, in the determination of the President, causes damage of sufficient severity and magnitude to warrant major disaster assistance under the Stafford Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby."

Catastrophic Incident. The NRF defines a Catastrophic Incident as: "Any natural or manmade incident, including terrorism that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions." The NRF Catastrophic Incident Annex further states: "A catastrophic incident could result in sustained nationwide impacts over a prolonged period of time; almost immediately exceeds resources normally available to State, tribal, local, and private-sector authorities in the impacted area; and significantly interrupts governmental operations and emergency services to such an extent that national security could be threatened." Generally, catastrophic incidents will be declared a Major Disaster under the Stafford Act.

(Refer to the "Emergency Management System" section of this plan, under the heading "National Response Framework" for additional information.)

Threat Assessments. Assessing the terrorism threat is a key component of crisis management. It requires a highly coordinated effort between law enforcement agencies at all levels of government. It also relies on timely information from intelligence agencies, private institutions, and the public. The following depicts functions performed at the local, state, and/or federal levels related to assessing, evaluating, categorizing, and if appropriate, disseminating warning following receipt of a terrorist threat:

Local Threat Assessments. Local law enforcement, in conjunction with the MSP, FBI, and other pertinent law enforcement elements, should complete Joint Threat Assessments to:

Promote interagency collaboration by coordinating criminal investigative intelligence relating to WMD terrorism potential threat elements located within, or that may pose a threat to, the jurisdiction.

Assess the threat to particular targets to enable the jurisdiction to better focus their prevention, protection, and preparedness efforts to reduce the likelihood or effects of an attack and to enhance local response effectiveness should those efforts prove unsuccessful.

Identifying the WMD(s) or CBRNE material(s) likely to be employed by existing potential threat elements to better identify equipment, training, exercising, infrastructure protection and/or mutual aid needs necessary to respond effectively to those particular types of hazards.

Local Response to a Potential Terrorist Threat
(Approximate sequence of events)

THREAT RECEIVED

▼

LOCAL RESPONDERS

Police/fire/EMS respond.
Establish Incident Command Post.
Notifications made per local EOP (including notification of MSP/EMHSD District Coordinator and local FBI Field Office).
Conduct on-scene assessment.

▼

CONFIRMED WMD PRESENCE?

▼

YES	NO
▼	▼
FBI	**INVESTIGATION CONTINUES**

Special Agent-in-Charge (SAC) is designated federal On-Scene Coordinator (OSC) and leads response efforts.
Establishes Joint Operations Center (JOC).*

***Notes:** Local and state liaisons will be provided to the JOC. If the incident becomes federally-declared under the Stafford Act and a Joint Field Office (JFO) is established, the JOC will become a component of the JFO.

▼

LOCAL JURISDICTION/STATE

Establishes local EOC and SEOC.*

***Note:** Federal liaisons will be provided to the local EOC and SEOC.

▼

SITUATION HOSTILE?

If YES, conduct assault/tactical recovery.
Conduct operations as required.

▼

SITUATION RESOLVED?

If YES, stand down (investigation may continue).
If NO, continue operations.

State Threat Assessment and Analysis. The MSP coordinates state-level threat assessments. The Michigan Intelligence Operations Center within the MSP (MSP/MIOC) is the action agency and serves as the focal point to ensure effective information flow between national intelligence and law enforcement agencies and the local law enforcement community. The MSP/MIOC also serves as the principal advisor to the MSP/EMHSD regarding general or specific Intrastate alerts. The table at **TAB E** and the diagram below depict key actions to be initiated following receipt at the state level and/or notification by a local jurisdiction of a terrorist threat/incident: (See chart below.)

State Response to a Potential Terrorist Threat
(Approximate sequence of events)

THREAT RECEIVED

▼

MSP

Receives/identifies and initially analyzes threat (MSP/MIOC).
Notifies FBI (Joint Terrorism Task Force, Detroit Field Office) to initiate formal Threat Credibility Assessment at FBI Headquarters.
Notifies MSP/EMHSD and pertinent local and tribal jurisdiction(s) and state departments/agencies of the status of assessment.
Initiates immediate life safety actions (in conjunction with local law enforcement and the FBI) if circumstances require such actions.

▼

CONFIRMED WMD PRESENCE?

▼

YES	NO
▼	▼
FBI	**INVESTIGATION CONTINUES**
Special Agent-in-Charge (SAC) is designated federal On-Scene Coordinator (OSC) and leads response efforts. Establishes Joint Operations Center (JOC).* ***Notes:** Local and state liaisons will be provided to the JOC. If the incident becomes federally-declared under the Stafford Act and a Joint Field Office (JFO) is established, the JOC will become a component of the JFO.	

▼

LOCAL JURISDICTION/STATE

Establishes local EOC and SEOC.*

***Note:** Federal liaisons will be provided to the local EOC and SEOC.

▼

SITUATION HOSTILE?

If YES, conduct assault/tactical recovery.
Conduct operations as required.

▼

SITUATION RESOLVED?

If YES, stand down (investigation may continue).
If NO, continue operations.

Federal Threat Assessment and Analysis. The FBI's Strategic Information and Operations Center (SIOC) is the focal point and operational control center for all federal intelligence, law enforcement, and investigative law enforcement activities related to domestic terrorist incidents or credible threats, including leading attribution investigations. The SIOC houses the National Joint Terrorism Task Force (NJTTF). The mission of the NJTTF is to enhance communications, coordination, and cooperation among federal, state, local, and tribal agencies representing the intelligence, law enforcement, defense, diplomatic, public safety, and homeland security communities by providing a point of fusion for terrorism intelligence and by supporting Joint Terrorism Task Forces (JTTFs) throughout the United States.

The diagram below depicts initial federal actions that will be implemented upon the receipt of a threat.

Response to a Potential Terrorist Threat Detected at the Federal Level
(Approximate sequence of events)

THREAT RECEIVED

▼

FBI
Notifies WMD Operational Unit / SIOC.
Notifies Department of Homeland Security (DHS).
Notifies Crisis/Consequence Management agencies per NRF.
Conducts Threat Credibility Assessment.

▼

THREAT CREDIBLE?

▼

YES	NO
▼	▼
FBI Transmit Alert/Advisory/Assessment via Terrorist Threat Warning System to appropriate agencies. Activates Strategic Information and Operations Center (SIOC). SIOC notifies National Operations Center (NOC). Activates Joint Operations Center (JOC) – under operational control of FBI Special Agent-in-Charge (SAC).* FBI SAC considers requesting activation of Domestic Emergency Support Team (DEST) when JOC is activated. ***Notes:** Local and state liaisons will be provided to the JOC. If the incident becomes federally-declared under the Stafford Act and a Joint Field Office (JFO) is established, the JOC will become a component of the JFO.	**INVESTIGATION CONTINUES**

▼

DEST
DEST deployed through National Security Council (NSC) upon appropriate federal approvals.
DEST assists FBI SAC by providing expert advice and support concerning federal capabilities to resolve incident.

▼

FEMA
Establishes JFO, if incident is federally-declared under the Stafford Act.
Assesses other response needs (federal, state, and local).
Activates appropriate resources per the NRF.

▼

SITUATION HOSTILE?
If YES, FBI coordinates assault/tactical recovery.
Conduct operations as required.

▼

SITUATION RESOLVED?
If YES, stand down (investigation may continue).
If NO, continue operations.

Coordinating with Federal Agencies for Threat Assessment and Analysis. Intelligence and or law enforcement information regarding potential terrorists may be developed at the federal, state, or local levels of government. When the MSP receives information concerning a potential terrorist WMD threat in a local community, it will notify the JTTF of the FBI Detroit Field Office, which in turn will notify FBI Headquarters. The FBI Headquarters will initiate a formal Threat Credibility Assessment. The JTTF and MSP will be kept appraised of the status of the assessment. The MSP/MIOC will inform pertinent local and tribal jurisdiction(s) and state departments/agencies of the status of the assessments. If the FBI

determines that the threat is credible, the MSP/EMHSD will be notified via secure means. Activations of EOCs, dissemination of notifications and warnings, and other response measures will be implemented in accordance with established protocols.

Threat Levels. The FBI will initiate a Threat Credibility Assessment when it receives information regarding a potential threat. A threat level will be determined based upon the results of this analysis and will fall into one of the four following categories which will lead to an escalating range of actions that will be implemented concurrently for crisis and consequence management:

Minimal Threat. Received threats do not warrant actions beyond normal liaison notifications or placing assets or resources on a heightened alert (agencies are operating under normal day-to-day conditions).

Potential Threat. Intelligence or an articulated threat indicates a potential for a terrorist incident. However, this threat has not yet been assessed as credible. Accordingly, a formal Threat Credibility Assessment in support of operations with assistance from select interagency experts will be initiated. For a WMD or CBRNE threat, this assessment includes three perspectives:

Technical feasibility. An assessment of the capacity of the threatening individual or organization to obtain or produce the material at issue.
Operational practicality. An assessment of the feasibility of delivering or employing the material in the manner threatened.
Behavioral resolve. A psychological assessment of the likelihood that the subject(s) will carry out the threat, including a review of any written or verbal statement by the subject(s).

Credible Threat. The Threat Credibility Assessment indicates that the potential threat is credible and confirms the involvement of WMD in the developing terrorist incident. Federal agencies initiate actions to augment state and local authorities in responding to potential consequences of terrorist employed WMD. The FBI Headquarters activates its SIOC and normally a JOC will be established by the FBI under the operational control of the FBI Special Agent-in-Charge (SAC). (Refer to the "FBI Joint Operations Center" section.)

Weapon of Mass Destruction (WMD) Incident. A WMD terrorism incident has occurred which requires an immediate process to identify, acquire, and plan the use of federal augmentation to state and local authorities in response to limited or major consequences of a terrorist use or employment of WMD. This incident has resulted in mass casualties.

Terrorist Evolving Threat Evaluation. The National Operations Center (NOC), National Counterterrorism Center (NCTC), and FBI SIOC coordinate information regarding terrorist threats. When the FBI or DHS/Information Analysis and Infrastructure Protection (IAIP) determines that a credible threat exists, it notifies and coordinates with the NOC, which immediately notifies the FBI SIOC, if it has not already been informed. The DHS Secretary may elect to activate and prepare to deploy various special teams to conduct prevention, preparedness, response, and recovery activities. Federal departments and agencies are notified as appropriate by the NOC. The affected state(s) and tribes are also notified by the NOC using appropriate operational security protocols. (Refer to the "Threat Warnings" section for additional information.)

Terrorism Advisory. Upon determining that a credible threat exists, the FBI will notify the DHS. Based upon the information provided, the DHS will initiate an appropriate advisory under the National Terrorism Advisory System (NTAS). State departments/agencies, local, and tribal governments will then initiate appropriate actions based on the threat level established by the DHS. (Refer to the "National Terrorism Advisory System" and "Communications and Warning in a WMD Attack" sections for additional information, and to **TAB E** for a list of state response actions keyed to the various levels in the NTAS. Suggested NTAS-keyed response actions for local governments can be found in various guidance materials distributed statewide by the MSP/EMHSD.)

Critical Infrastructure and Key Resources.

Critical Infrastructure Defined. "Critical Infrastructure" (CI) is defined in the NRF as: "Systems, assets, and networks, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters." Critical Infrastructure can be grouped by those that would have a national impact, and those that would have a widespread state-level impact. Critical Infrastructure and Key Resources (see next section) at the local and state level have been identified during local needs assessments, as described below.

Key Resources Defined. In the NRF, "Key Resources" (KR) are defined as: "Any publicly or privately controlled resources essential to the minimal operations of the economy and government."

Critical Infrastructure and Key Resources (CIKR) Identification.

Local Jurisdictions. Local Planning Teams (LPTs) consisting of various emergency response agencies (i.e., law enforcement, fire service, hazardous material response, emergency medical, emergency management, public health, government administrative, public works, emergency communications, and health care) are responsible for identifying and prioritizing CIKR within their jurisdictions for vulnerability reduction measures, consistent with current DHS guidelines.

State Departments / Agencies. Each state department/agency is responsible for reviewing its CIKR to determine those elements that are critical to the department/agency's ability to perform Essential Functions that are vital to public health, safety, and welfare. The MSP/MIOC Critical Infrastructure Protection (CIP) Desk coordinates this effort and compiles the state department/agency findings. The DTMB reviews and analyzes this information for the purposes of development and coordination of department/agency-specific Continuity of Operations Plans (COOPs).

Federal Departments/Agencies. A host of federal departments/agencies continually work together and with states, local, and tribal governments to identify CIKR of national interest, and that effort includes Michigan. The MSP/MIOC CIP Desk coordinates with the federal departments/agencies, directly or through the appropriate state counterpart department/agency, to produce the most comprehensive list possible of CIKR in Michigan (see next section).

Michigan CIKR. The MSP/MIOC CIP Desk, working in partnership with federal and state departments/agencies, tribal and local governments, and key private sector utilities such as the electric power and communications industries, has coordinated the development of a comprehensive list of public and private sector CIKR. This list provides the basis for the ongoing implementation of appropriate mitigation and prevention measures designed to reduce the likelihood or potential impacts of a terrorist attack or other homeland security threats.

CIKR Protection Plans. Federal guidance to the states on enhancing CIKR protection and resiliency is provided in the National Infrastructure Protection Plan (NIPP) and the sector-specific plans that have been developed of the 16 sectors of the economy as defined in the NIPP. (Refer to the following web site for additional information on the NIPP: http://www.dhs.gov/nipp.) The NIPP outlines the risk reduction framework which served as the basis for development of the Michigan Infrastructure Protection Plan (MIPP) – the state-specific counterpart to the NIPP – by the MSP/MIOC CIP Desk and a wide array of sector-specific stakeholders in Michigan.

Criticality Assessments. The following considerations are used to determine the criticality of a particular CIKR, with public safety remaining the highest priority throughout this process:

Criticality Assessment Considerations

Asset Consideration	Brief Description
Casualty Impact	The potential for loss of or serious injury to human life associated with an attack on the asset, both internal and external (e.g., due to an explosion, chemical attack, or catastrophic failure/collapse of the asset).
Business Continuity	The extent to which loss of and/or serious damage to the asset would adversely impact the ability of the jurisdiction/business/industry to continue operations.
Economic Impact	The extent to which loss of and/or serious damage to the asset (including secondary effects) would affect the livelihood, resources, or wealth of individuals and businesses in the area, state, region, or country.
Emergency Response Function	The role the asset plays in emergency response, either in direct services or in enabling access to emergency services, including gaining access to affected locations and evacuating people from affected locations.
National Strategic Importance	The contribution that the asset makes to maintain national and regional security and government continuity.
Replacement Cost	The capital investment required to replace the asset, including related site restoration / preparation, construction, and related replacement and repairs to support infrastructure.
Environmental Impact	The acute and/or chronic effects (including secondary effects) loss of the asset would have on the environment resulting in significant property damage due to toxic substances or destruction of protected areas.

Vulnerability Reduction. The MSP/MIOC CIP Desk coordinates CIKR vulnerability reduction programs, as appropriate and consistent with the availability of resources. Vulnerability reduction efforts for CIKR are based on the level of visibility, accessibility, criticality, threat, site population, value of the CIKR to a potential threat element, and potential for collateral mass casualties. In those instances when appropriate vulnerability reduction is beyond the capability of local jurisdictions and/or private industry to implement, and state support is not practical, potential redundancies that can help reduce the

likelihood of total system failure with supporting transition plans will be identified, instituted, and exercised wherever possible to ensure their effectiveness.

Countermeasures. Countermeasures are normally implemented based on the results of threat and vulnerability assessments. Countermeasures are measures of protection applied to CIKR that necessitate the allocation of resources. They can be simple or complex, and may differ considerably in terms of feasibility, expense, and effectiveness. Countermeasures can be implemented by federal or state departments/agencies, local and tribal governments, private utilities / organizations, or any effective combination of these entities. The MSP/MIOC CIP Desk tracks and promotes the implementation of countermeasures aimed at protecting state assets, as well as those protecting non-state assets that are located in or have a significant impact on Michigan.

Critical Infrastructure and Key Resources (CIKR) Prioritization. Once CIKR are identified, it is then necessary to prioritize them for the potential application of resources to protect them from terrorist threats and/or damage caused by a natural disaster or other incident. In general, if a CIKR is assessed to be "critical" and is both threatened and vulnerable, it will be designated a high priority for the application of protective measures. Critical Infrastructure and Key Resources (CIKR) that are either threatened or vulnerable, but not both, will be designated as a moderate priority for protective measures. Critical Infrastructure and Key Resources (CIKR) that are neither threatened nor vulnerable will be designated as a low priority for protective measures.

Unavoidable Risk. In some instances it may not be practical to implement protective measures to eliminate or significantly reduce the vulnerability of a CIKR. In such cases, risk must be unavoidably accepted. However, methods to ensure resiliency of operations and services via vulnerability reduction initiatives (as discussed on the previous page) must be implemented and contingency plans developed to mitigate the effects of a potential attack.

Direction and Control for a WMD Attack. Direction and Control for WMD terrorist incidents will be in accordance with the National Incident Management System (NIMS) and therefore similar to that used for other emergencies and disasters (as described in the Direction and Control ESF). However, due to the criminal aspects of a terrorist incident, as well as certain federal authorities, there will be several distinct differences in command relationships and operational procedures. Accordingly, the overall response will be segmented into the two broad categories of crisis management and consequence management:

Crisis Management. Crisis management includes measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism. The laws of the United States assign primary authority to the federal government to prevent and respond to acts of terrorism. States and local governments provide assistance to the federal government as required.

The FBI is designated as the Lead Federal Agency for the investigative response to a threatened or actual terrorist incident. The DHS oversees and coordinates a comprehensive national strategy to safeguard the country against terrorism and provides for overall coordination of the federal response to terrorist attacks. Other federal departments/agencies that have designated authorities under federal law will manage their response functions in support of the FBI and DHS, and in coordination with other departments/agencies involved in response and recovery operations.

The FBI response is primarily focused on evidence collection and preservation, crime scene management, and requesting crime-related federal response assets. State-level law enforcement and crisis management activities are coordinated through the MSP. Although crisis management is predominantly a law enforcement response, it may be supported by technical operations and by federal, state, and local consequence management activities, which may run concurrently.

Consequence Management. Consequence management includes measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. The laws of the United States assign primary authority to the states to respond to the consequences of terrorism. The federal government provides assistance to states as required. Accordingly, FEMA has been designated as Lead Federal Agency for consequence management and is responsible for coordinating federal response and support of the states, as appropriate. The MSP/EMHSD, in conjunction with state, local, tribal, and nongovernmental partners, coordinates with FEMA in fulfilling non-law enforcement consequence management response and recovery missions.

Coordination Relationships. The large number of local, state, and federal departments/agencies that could respond to a terrorist threat or incident and the potential scope, complexities, and catastrophic effects that may be associated with incidents involving a WMD requires that effective coordination be maintained between all levels of government throughout the response. The organizational structure chart on the following page depicts the overall federal, state, and local

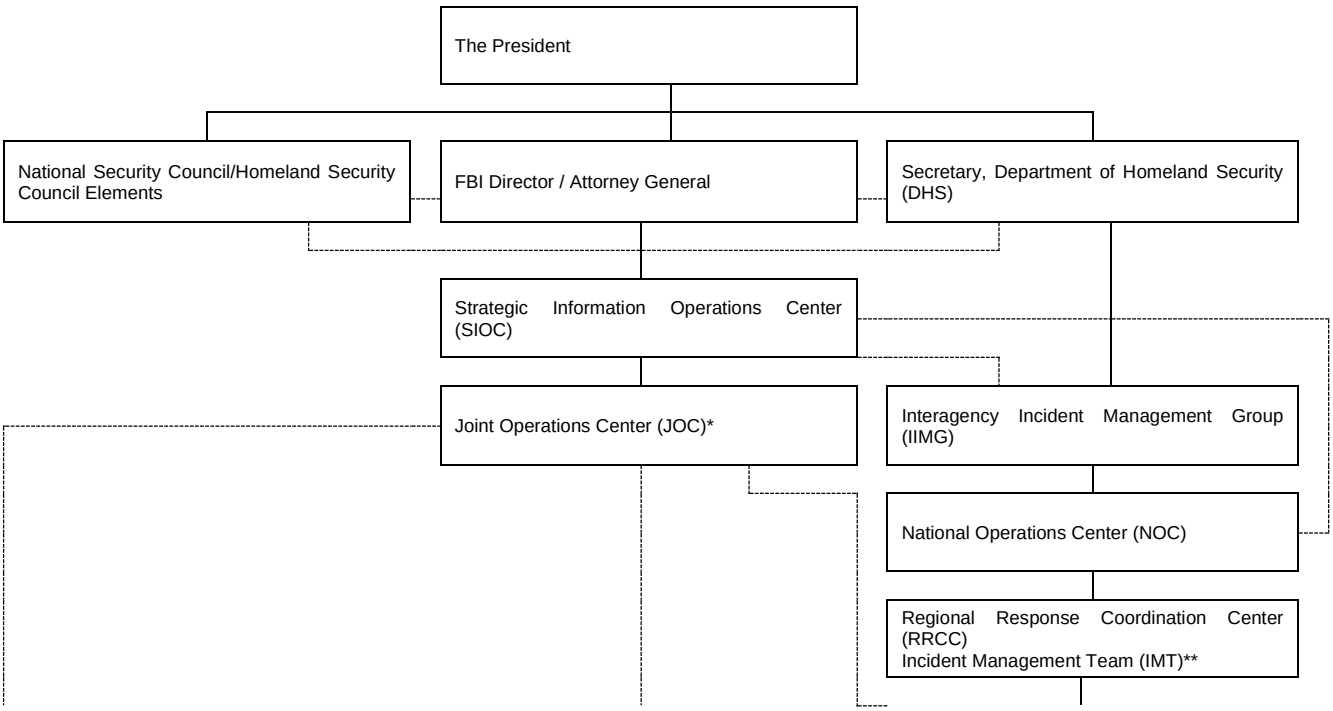
coordinating relationships in support of response operations. (Note that the command structures are fluid and situationally-dependent as the incident matures.)
Consequence Management Phases. Consequence management planning and response is conducted in all three incident phases (i.e., pre-incident/emerging threat, response, and recovery).

Pre-Incident/Emerging Threat. The initial FBI response to a potential threat will primarily be focused on law enforcement/investigative actions and efforts, in concert with appropriate federal departments/agencies, the MSP, and local and tribal law enforcement agencies. Efforts will be taken in the interest of public safety and welfare and is predominately concerned with preventing and resolving the threat. Should a Threat Credibility Assessment by the FBI determine that a potential threat is valid and the involvement of a WMD is confirmed, the threat transitions to a WMD or CBRNE terrorist situation requiring an immediate process to identify, acquire, and plan the use of federal resources to augment state, local, and tribal authorities in lessening or averting the potential consequences of terrorist use or employment of WMD or CBRNE material. Federal Emergency Management Agency (FEMA) will support the effort by coordinating consequence management planning with the MSP/EMHSD and local emergency management agencies, and by pre-positioning tailored resources as appropriate. During this phase, there generally will be neither an incident site nor external consequences, and therefore, there may be no need for establishment of the traditional Incident Command System (ICS) elements such as an Incident Command Post or Joint Command Post.

Response. During this phase, the threat transitions to an **act of terrorism.** Consequences become imminent or occur that may prompt the President to implement a federal consequence management response. The federal response will primarily be directed toward public safety and welfare and the preservation of human life. Federal Emergency Management Agency (FEMA) will consult with the White House and the Governor's Office to determine if a federal consequence management response is required. Local and state departments/agencies will initiate response efforts and orchestrate support to save lives, minimize damage to property, and deter additional attacks. The FBI Special Agent-in-Charge (SAC) of the local FBI Field Office normally will establish a Command Post to manage a threat situation based upon graduated and flexible response. In a terrorist threat or incident that may involve a WMD or CBRNE material, the traditional FBI Command Post will transition to a Joint Operations Center (JOC) which may temporarily incorporate a fourth functional entity (i.e., the Consequence Management Group). Following a terrorist incident, the President, in coordination with FEMA and the Governor's Office, may designate the situation as an Emergency or Major Disaster under the federal Stafford Act. When this declaration is made, the JOC will transition into a Joint Field Office (JFO).

Recovery. If the WMD incident is considered to be the result of terrorism, FEMA and the FBI will conduct crisis and consequence management activities concurrently in accordance with the provisions of the National Response Framework (NRF). The FBI will continue law enforcement investigations in concert with the MSP and local/tribal law enforcement agencies, and FEMA will coordinate support under the NRF. State operations and support will be in accordance with the provisions in this plan.

Coordination Relationships for Response Operations



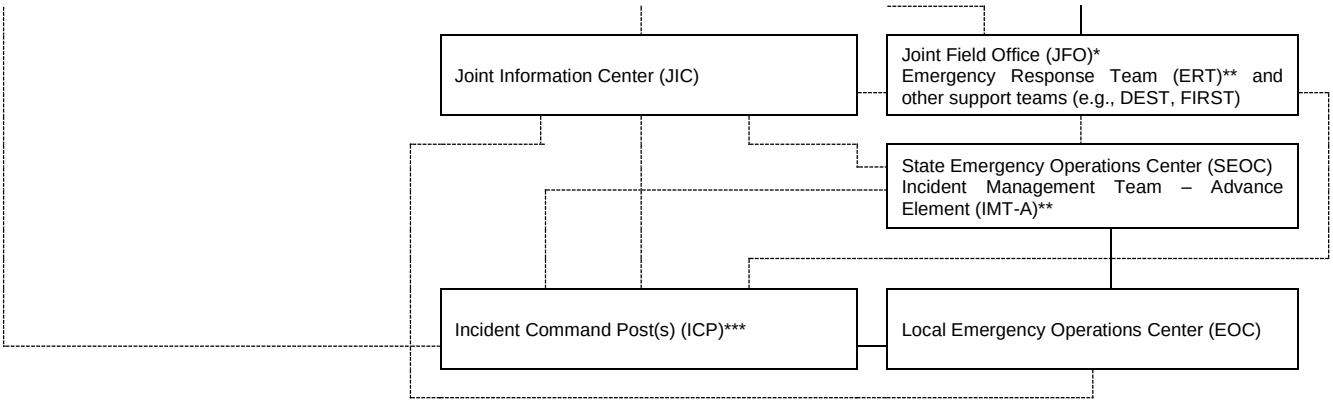


TABLE NOTES
*If the incident becomes federally-declared under the Stafford Act and a Joint Field Office (JFO) is established, the Joint Operations Center (JOC) becomes a component of the JFO.

**The Incident Management Team (IMT) is deployed from the Regional Response Coordination Center (RRCC) to: 1) work directly with the State (IMT-Advance Element) to gather incident information and establish a JFO; and 2) provide staffing for the JFO. A national level IMT (IMT-N) may be deployed for large-scale, high-impact incidents, as required.

***The FBI and State may also establish Command Posts – either co-located with or in close proximity to the ICP.

Dashed lines (- - -) indicate key coordination linkages. Solid lines indicate a direct operational relationship.

Local Responsibilities and Organizations for Coordinating Response to WMD Attacks.

Chief Executive Officials. The Emergency Management Act (1976 PA 390, as amended) provides local chief executive officials with certain authorities in situations where there is an occurrence or threat of widespread or severe damage, injury, or loss of life or property from a natural or human-made cause.

Local Public Health Officers. The Public Health Code (1978 PA 368, as amended) provides broad authorities to local public health officers to take action to control epidemics and to prevent the spread of infectious diseases within a community. These authorities may be applicable in a WMD attack.

Local Emergency Responders. Local fire departments, law enforcement agencies, 911 centers, hazardous material teams, and emergency medical services (EMS) are normally among the first to be involved with the response to terrorist incidents, especially those involving a WMD. As response efforts escalate, the local emergency management agency, local health department, public works, health care facilities, and local government officials will help coordinate needed services. In incidents associated with public transportation (e.g., airlines, mass transit, railroads, etc.), workers and officials from these transportation organizations may be among the first responders as well.

Local Command and Control. The initial local response elements must establish positive command and control mechanisms to reduce confusion and to optimize the use of available assets.

Incident Command System (ICS). Local departments/agencies will implement the ICS when responding to terrorist attacks in accordance with the provisions of the National Incident Management System (NIMS). (Refer to the **Attachments** for a full text version of the NIMS adoption provisions set forth in Michigan Executive Directive 2005-9– "Adoption of the National Incident Management System for Emergency Incident Management in Michigan".)

Unified Command (UC). When the scope of the incident response is such that multiple departments/agencies become involved, the ICS will normally transition to a Unified Command. The UC will continue to operate at the scene throughout the response.

Emergency Operations Center. The local emergency management agency will operate an EOC to coordinate support to the Incident Commander/Unified Command and to facilitate intra- and inter-jurisdictional support. The EOC will coordinate support over and above local and mutual aid agreements in conjunction with the MSP District Coordinator and the SEOC.

State Responsibilities and Organizations for Coordinating Response to WMD Attacks.

MSP Director. The MSP Director coordinates crisis management law enforcement efforts and intelligence efforts with local and tribal law enforcement departments/agencies, the FBI, and other involved federal and state law enforcement departments/agencies. Such coordination ensures comprehensive, well-coordinated, and mutually-supporting law enforcement operations. The law enforcement and investigative response to terrorist threats or incidents is based upon the following priorities: 1) preservation of life or minimizing risk to public safety and health; 2) preventing a threatened act from being carried out or an existing terrorist act from being expanded or aggravated; 3) locating, accessing, rendering safe, controlling, containing, recovering, or disposing of a WMD that has not yet functioned, and disposing of CBRNE material in coordination with appropriate state and federal departments/agencies; and 4) apprehending and successfully prosecuting perpetrators of terrorist threats or incidents.

State Director of Emergency Management and Homeland Security. The MSP Director is designated as the State Director of Emergency Management (under 1976 PA 390, as amended) and State Director of Homeland Security (under Executive Order 2017-1). As such, the MSP Director is ultimately responsible for ensuring that appropriate state and federal assistance is provided to local governments in response to threats or acts of terrorism. Such support is organized and coordinated by the MSP/EMHSD. The MSP/EMHSD Commander is designated as the Deputy State Director of Emergency Management and the Field Support Bureau Commander is the Deputy State Director of Homeland Security.

Michigan State Police (MSP) District Commanders. Michigan State Police (MSP) district commanders are responsible for coordinating the district-level MSP response to WMD terrorist attacks. Within existing resource constraints, such support may include the provision of assistance to local law enforcement departments/agencies in carrying out operations related to traffic control, perimeter security, and key facilities security.

Michigan State Police, Emergency Management and Homeland Security Division (MSP/EMHSD). As it does with other emergencies and disasters, the MSP/EMHSD is responsible for coordinating intra- and interstate consequence management activities in support of affected local governments.

State Emergency Operations Center. The SEOC operates in accordance with the provisions and organizational structures outlined in the Direction and Control ESF. The SEOC operations for a WMD terrorist attack may entail activation and deployment of the statewide Regional Response Team Network (RRTN) and other state response teams, as well as requesting/coordinating appropriate federal response assets. Normally, a liaison element will be provided from the SEOC to the Consequence Management Group within the FBI JOC, if activated, to provide advice regarding decisions that impact the general public or critical infrastructures. In turn, the FBI may provide representatives to the SEOC to coordinate consequence management support to law enforcement operations. (Refer to the "Federal Responsibilities and Organizations for WMD Attacks" section for more details on the FBI JOC.)

Alternate State Emergency Operations Center. Unlike with random occurring natural or technological disasters, the SEOC could potentially be a specific target of a terrorist attack. If this should occur, or should the threat warrant, the ASEOC will be activated in accordance with the Direction and Control ESF, the Michigan Continuity of Government Plan (MCOGP), and the National Terrorism Advisory System shown at **TAB E.**

Continuity Facilities. An organized terrorist attack against Michigan State Government in the Lansing area will likely trigger activation of an Alternate Seat of Government (ASG) and Alternate Operating Facilities (AOFs), in accordance with the MCOGP and department/agency Continuity of Operations Plans (COOPs). The purpose of these facilities is to ensure the continuation of Essential Functions and the preservation of Constitutional governance throughout the attack. (The locations of these facilities are identified in the various continuity plans.) Every attempt will be made to co-locate the ASEOC and ASG or locate the two facilities in close proximity to each other to maximize attack response and recovery coordination. (Details are found in the MCOGP.) Depending on the nature, location, and anticipated impacts of the terrorist attack, it may also be necessary to activate counterpart continuity plans (COG and COOP) at the local government level to ensure coordinated statewide governmental continuity. The MSP/EMHSD will work with the Governor's Office, the Michigan Judiciary and Michigan Legislature, the DTMB, and the MSP/EMHSD District Coordinators to implement statewide continuity measures in accordance with the aforementioned continuity plans.

State Command Post (SCP). An SCP may be established and co-located with the Incident Command Post (ICP) at the scene of a terrorist WMD attack due to the extent of state involvement and coordination required to support the local response. The MSP mobile command vehicle or MSP/EMHSD mobile command/emergency operations vehicle, if available, may be used as the SCP. If either of the mobile command vehicles cannot be made available in a timely manner, another suitable vehicle or fixed site location at or near the incident scene will be selected as the SCP. (Refer to the Direction and Control ESF.)

State Department / Agency Emergency Coordination Centers. State departments/agencies have been tasked to develop and staff their own internal Emergency Coordination Center (ECC) to provide continuous support to their representative at

the SEOC and/or other emergency coordinating facilities. (Refer to "State Department General Responsibilities" in the Emergency Management System section of this plan.) A department/agency ECC may be activated by the department/agency director, EMC, or other authorized individual, depending on the type or impact of the WMD attack and resulting support requirements. Departments/agencies that activate their ECC are responsible for coordinating and communicating all department/agency response measures and actions with/through their representative at the SEOC and/or other emergency coordinating facilities.

Federal Responsibilities and Organizations for Coordinating Response to WMD Attacks. Following are several of the federal departments/agencies and assets that have primary responsibilities and/or exercise functions for certain aspects of the overall law enforcement and intelligence response to threats or acts of terrorism:

Secretary of Homeland Security. During actual or potential terrorist attacks, the overall coordination of federal incident management activities is executed through the Secretary of Homeland Security. Other federal departments/agencies will carry out their incident management and emergency response authorities and responsibilities within this overarching coordinating structure. (Refer to **TAB F**–"Federal Response Support Assets" for a comprehensive listing of federal departments/agencies and assets that could support response operations.)

Attorney General of the United States/Federal Bureau of Investigation. According to HSPD-5, "The Attorney General has lead responsibility for criminal investigations of terrorist acts or terrorist threats by individuals or groups inside the United States, or directed at U.S. citizens or institutions abroad, where such acts are within the federal criminal jurisdiction of the United States, as well as for related intelligence collection activities within the United States, subject to the National Security Act of 1947 and other applicable law, Executive Order 12333, and Attorney General-approved procedures pursuant to that Executive Order." The Attorney General generally acts through the FBI for acts of terrorism.

Principal Federal Official (PFO). The PFO is the federal official designated by the Secretary of Homeland Security to act as his/her representative locally to oversee, coordinate, and execute the Secretary's incident management responsibilities under HSPD-5 for terrorist attacks (or other declared incidents under the Stafford Act) of a catastrophic or unusually complex nature that require extraordinary coordination. The PFO may elect to use the JOC as an initial operating facility for strategic management and identification of state, local, and tribal requirements and priorities, and coordination of the federal response. The JOC and PFO will transition into the JFO when established.

FBI Special Agent-in-Charge. The FBI is the lead federal agency for criminal investigations of terrorist acts or threats and intelligence collection activities within the United States. The Special Agent-in-Charge (SAC) of the local FBI Field Office will manage the initial response to a terrorist threat or incident. The SAC, in coordination with FBI Headquarters, will be kept appraised of possible courses of action and potential deployment of the Domestic Emergency Support Team (DEST). The FBI SAC will establish initial operational priorities based upon the specific circumstance of the threat or incident. If a JOC is established, it will be under the operational control of the SAC. When a PFO is designated, the FBI SAC will provide full and prompt cooperation, resources, and support to the PFO, as appropriate and consistent with applicable authorities.

Interagency Incident Management Group. The IIMG facilitates strategic-level interagency incident management coordination and course of action development and serves as an advisory body to the Secretary of Homeland Security.

National Counterterrorism Center (NCTC). The NCTC serves as the primary federal organization for analyzing and integrating all intelligence possessed or acquired by the U.S. government pertaining to terrorism and counterterrorism, excepting purely domestic counterterrorism information. The NCTC may, consistent with applicable law, receive, retain, and disseminate information from any federal, state, or local government or other source necessary to fulfill its responsibilities.

National Operations Center (NOC). The NOC is the primary national hub for domestic incident management operational coordination and situational awareness. The NOC is a standing, 24/7 interagency organization fusing law enforcement, national intelligence, emergency response, and private sector reporting. The NOC facilitates homeland security information sharing and operational coordination with other federal, state, local, tribal, and nongovernmental EOCs. The NOC integrates representatives from DHS and other federal departments/agencies to support steady-state threat monitoring requirements and situational awareness, as well as operational incident management coordination.

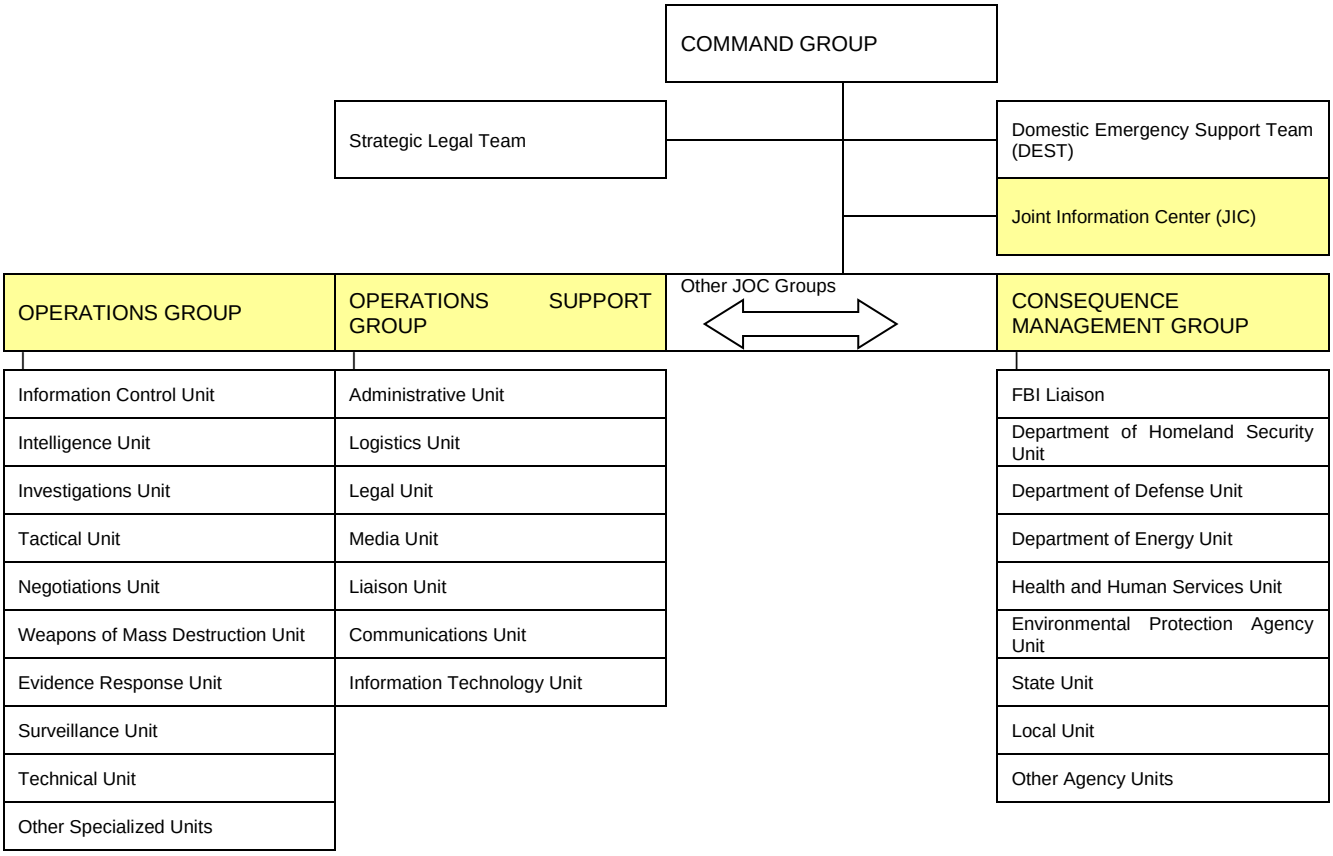
Strategic Information and Operations Center (SIOC). Upon determination of a credible threat, FBI Headquarters will activate the SIOC to coordinate and manage the national level support to a terrorism incident. At this level, the SIOC essentially mirrors the organizational structure of the FBI JOC. Liaison officers from designated federal departments/agencies will coordinate with and provide assistance to the FBI. The SIOC serves as the focal point for law enforcement operations and maintains direct connectivity with the NOC.

Regional Response Coordination Center (RRCC). The RRCC is a standing facility operated by the DHS/FEMA that is activated to coordinate regional response efforts, establish federal priorities, and implement local federal program support until a JFO is established in the field and/or the Principal Federal Official (PFO), Federal Coordinating Officer (FCO), or Federal Resource Coordinator (FRC) can assume their NRF coordination responsibilities. The RRCC establishes communications with the affected state emergency management agency and the National Response Coordination Center (NRCC), coordinates deployment of the Incident Management Team – Advance Element (IMT-A) to field locations, assesses damage information, develops situation reports, and issues initial mission assignments. Federal incident response operations are coordinated by the RRCC until a JFO is operational, which is normally a period of 48-96 hours. The Region V RRCC is located at the FEMA V office in Chicago, Illinois.

Joint Field Office (JFO). The JFO is a multi-agency coordination center established locally. It provides a central location for coordination of federal, state, local, tribal, nongovernmental, and private sector organizations with primary responsibility for threat response and incident support. The JFO enables the effective and efficient coordination of federal incident-related prevention, preparedness, response, and recovery actions. When an incident becomes federally-declared (under the Stafford Act) and a JFO is established, the FBI JOC (see description below) will become a section of the JFO and the FBI SAC will become the Senior Federal Law Enforcement Official (SFLEO) in the JFO Coordination Group.

FBI Joint Operations Center (JOC). In terrorist threat or attack situations that may involve a WMD, the traditional FBI Command Post (see description below) is expanded into a JOC incorporating a fourth functional entity, the Consequence Management Group. This group consists of representatives from federal, state, and local consequence management organizations and will address pre- and post-attack consequence operations. A FEMA representative will coordinate the actions of the JOC Consequence Management Group, expedite activation of a federal consequence management response should it be necessary, and work with an FBI representative who serves as a liaison between the Consequence Management Group and the FBI On-Scene Commander. (Refer to the "FBI Joint Operations Center Organizational Structure for a WMD Attack" chart below.) If a JFO is established (see description above), the JOC will be integrated into that organizational structure as a branch under the Operations Section. However, this will not significantly change the nature or focus of the staffing assignments of state agency personnel assigned to the JOC.

FBI JOC Organizational Structure for a WMD Attack



Note: Those components of the JOC structure that could potentially involve state personnel are highlighted in light yellow.

Joint Information Center (JIC). In addition to establishing a JOC, the FBI will coordinate with the MSP/EMHSD, DHS/FEMA and other involved departments/agencies in the establishment of a JIC to ensure timely flow of accurate information to the public. The JIC is a facility established to coordinate all incident-related public information activities. It is the central point of contact for all news media at the scene of the incident. (Refer to the Information and Planning ESF and the Technological Disaster Procedures/Nuclear Power Plant Incidents for more information on the JIC concept and operations.)

FBI Command Post. The initial FBI response during a crisis situation will be mounted by the local FBI Field Division, which normally will establish a Command Post to manage the threat on a graduated and flexible basis. The Command Post will consist of a Command, Operations, and Support Groups and will interface with the Incident Command/Unified Command established by local and state responders. Should the threat/incident exceed the capabilities of the FBI Field Division or involve a WMD, additional resources will be requested from the FBI's Critical Incident Response Group (CIRG) and normally a JFO will be established.

Communications and Warning in a WMD Attack. The following information conforms to the provisions contained within the Warning and Communications ESF and outlines procedures that should be considered/implemented for WMD-specific incidents.

Emergency Communications: Operational Considerations. Effective, reliable, and integrated communications systems are vital for mounting and sustaining an effective response to emergencies or disasters. A host of available communications systems for this purpose are identified in the Warning and Communications ESF. However, there are several key factors must be considered when planning for or responding to WMD terrorist attacks:

Saturation of Commercial Systems. Capacities of commercial communications systems may be quickly overwhelmed due to the demand posed by the public, essentially making them inoperable for use by emergency personnel.

Security. It is essential that communications between responding departments/agencies be conducted in a secure environment to prevent intercept by those who conducted the attack. Information regarding Command Post locations, decontamination corridors, public evacuation routes, staging areas, etc. could be used for additional targeting operations. Further, misinterpretation of emergency communications could lead to broadcasts of inaccurate information which may ultimately endanger the public or cause undo fear and panic. Intentional false information disseminated via the public alerting systems can also endanger the public or cause undue fear and panic.

Interoperability. The effects of a WMD terrorist attack could require a local jurisdiction to request support from mutual aid partners, regional response teams, and state and federal departments/agencies. Interoperable equipment will permit a coordinated response and allow the full engagement of all available and needed assets.

Frequency Management. Potentially hundreds and even thousands of emergency responders may be operating at the scene of a large-scale WMD incident. Various components of the response will require dedicated frequencies to permit unfettered operations.

Inter-Headquarters Linkages. The potential effects of a WMD attack will likely require a multi-agency response by local, state, and federal resources. It is essential that such resources respond in a well-coordinated manner to maximize their effectiveness. Secure communications between the local responders, EOC, SEOC/ASEOC, FBI Command Post, JOC/JFO, JIC, RRCC and responding elements from DOD, EPA, HHS, and other federal departments/agencies make it especially important that response plans and protocols address the "systems of choice" for various communications requirements. (Refer to the Warning and Communications ESF for information on emergency communications protocols.)

Alternate/Backup Systems. The capability to receive, evaluate, and disseminate information and warnings may be compromised due to damaged or destroyed communications infrastructure. Backup communications and warning systems must be pre-identified to support emergency operations. (Refer to the Warning and Communications ESF for information on primary and alternate/backup communications systems.)

Electromagnetic Pulse Effects. If a terrorist attack involves the employment of a nuclear device, the resulting EMP effects may degrade communications systems within a magnitude-related proximity of the detonation.

Intrastate Emergency Communications Systems. Communications used to conduct alert notifications and warning messages must be carefully selected based on the information to be disseminated, the urgency of the message, the intended recipients, and other factors. Also, specific response-related information must be transmitted using secure

communications systems. The systems shown in the following table will be used to for the following situations: (See table below.)

Intrastate Emergency Communications for Terrorist Threats/Attacks

System Situation	LEIN	800 MHz Radio	NAWAS	RACES	Email	MI CIMS	Telephone	EAS
NTAS Threat Level	**P**	**S**	**S**		**S**	**S**	**T**	
Threat-Specific	**P**	**S**					**T**	
Initial Warning	**P**	**S**						**S**
Warnings to Public								**P**
Response Communications	**S**	**P**		**T**				

Notes: P = primary communication system for situation; **S** = secondary communication system for situation; **T** = tertiary communication system for situation

Communications with Federal Departments/Agencies. A host of communications systems are available to the SEOC for connectivity with federal departments/agencies, including a number of secure systems:

National Law Enforcement Telecommunications System (NLETS). The NLETS is a sophisticated message-switching network linking local, state, and federal departments/agencies together for the expeditious exchange of interstate law enforcement and public safety related information.

Homeland Security Information Network (HSIN). The HSIN Situation and Connect Room and encrypted online, web-based system utilized by federal, state, local agencies, and private sector partners to share event information and intelligence.

STU III. A number of STU III telephones are available to several state departments/agencies to conduct intrastate and interstate secure communications, as well as to coordinate with federal law enforcement, intelligence, health-related and other key departments/agencies.

National Terrorism Advisory System (NTAS). The NTAS serves as the primary system for communicating terrorist threat advisories to government agencies, private institutions, and the public. It is designed to provide the impetus and framework for taking threat-driven protective measures and vulnerability reduction programs. (The NTAS replaces the former color-coded Homeland Security Advisory System, or HSAS.) Under the NTAS, the Secretary of Homeland Security and DHS will issue detailed alerts when the federal government determines that a credible terrorist threat exists. The NTAS alerts will provide a summary of the potential threat including geographic region, mode of transportation, critical infrastructure or private sector element(s) potentially affected by the threat, action being taken to ensure public safety, and recommended steps that individuals, communities, businesses, and governments can take to help prevent, mitigate, or respond to the threat. National Terrorism Advisory System (NTAS) alerts will include a clear statement on the nature of the threat, which will be defined in one of two ways:

"Elevated Threat". This alert level warns of a credible threat against the United States.

"Imminent Threat". This alert level warns of a credible, specific, and impending terrorist threat against the United States.

Depending on the nature of the threat, alerts may be sent to law enforcement, distributed to affected areas of the private sector (including critical infrastructure), or issued more broadly to the public through both official and social media channels. National Terrorism Advisory System (NTAS) threat alerts will be issued for a specific time period and will automatically expire. Alerts may be extended if new information becomes available or as a specific threat evolves. (See **TAB E** for a table listing specific actions state departments/agencies should consider for each NTAS threat level.)

National Terrorism Advisory System (NTAS) Transition Protocol. The MSP/MIOC and MSP Operations will initiate the appropriate NTAS transition protocol when the NTAS threat level is increased by the Secretary of Homeland Security and DHS. The protocol is designed to disseminate threat level information to allow consideration of protective measure implementation by state departments/agencies, local and tribal governments, private businesses and institutions, infrastructure owner/operators, and the public.

Types of Communications for Terrorist Activity. Communicating information pertaining to terrorist activity may be in the form of routine communication regarding ongoing analysis or via message traffic for situational awareness and the purpose of sharing operational information. However, there are three forms of communication pertaining to terrorist activity – those being alerts, advisories, and notifications.

Threat Warnings: Warning Entry Point. In a developing terrorist situation, especially one that may involve a WMD, timeliness associated with notifications must be condensed. The MSP/MIOC and MSP Operations (which are operational 24/7) serve as the primary entry points in Michigan for all terrorism notification and warning information that may come from the federal government, state departments/agencies, and local and tribal governments.

Threat Warnings: Evolving Threats Determined at the National Level. The FBI manages a Terrorist Threat Warning System to ensure vital information regarding terrorist threats/incidents reaches appropriate officials in the U.S. counterterrorism and law enforcement community responsible for countering terrorist threats. This information is coordinated with the DHS, NCTC, and FBI SIOC and is transmitted via secure teletype. Each message transmitted under this system is an alert, and advisory, or an assessment.

Alerts are issued if the terrorist threat is credible and specific. An advisory is issued if the threat is credible but general in both timing and target. An assessment is issued to impart facts and/or threat analysis. These products are fully coordinated with the DHS prior to release and are to be transmitted over secure teletype. In this regard, secure communication systems are available to the MSP for the exchange of classified information with the FBI and various federal law enforcement and intelligence agencies.

Threat Alerts: Notification. Alerts are normally disseminated by the FBI based upon credible and specific threat information. The response to such alerts may be implemented at one or more levels of government and the methods of announcing such alerts may vary by venue as well.

Local. Local officials, based upon information gathered within their jurisdiction/region (generally in concert with state and federal law enforcement agencies), may elect to increase security measures in accordance with existing emergency operational/critical infrastructure protection plans and protocols. This would normally be based upon specific information received from the DHS, FBI and/or MSP regarding a potential threat to a key infrastructure, a special event, or other potential terrorist targets. Localized threats will be announced at the discretion of the local officials, in coordination with the Governor.

Regional (Intrastate) / Infrastructure-Specific/Statewide. The MSP Director (SDEMHS) normally will be alerted of a potential terrorist threat in or affecting Michigan by appropriate elements of the MSP/MIOC and/or the Joint Terrorism Task Force (JTTF) of the FBI Detroit Field Office, via secure means. Based on an analysis of the situation, the MSP Director will work in conjunction with the Secretary of Homeland Security and/or DHS, the FBI, the Governor's Office, the MSP/EMHSD and MSP/MIOC, and other federal and state authorities to disseminate detailed NTAS alerts to law enforcement officials in the local jurisdiction(s) or regions where the threat resides, to specific infrastructure owner/operators or other private sector entities, or on a statewide basis. The alerts will be disseminated to the general public at the discretion of the Secretary of Homeland Security and DHS, based on consultation with the above-referenced authorities.

Nationwide. The decision will be made at the federal level (by the Secretary of Homeland Security and DHS, in coordination with other appropriate federal entities) if the threat warrants a nationwide alert through the NTAS.

Attack Notification of the Health and Medical Care Community. The following systems provide supplemental means of communicating terrorist threat information to connected segments of the health and medical care community in Michigan:

Intrastate Surveillance/Laboratory Notifications. The Michigan Disease Surveillance System (MDSS) is a disease information system that implements a National Electronic Disease Surveillance System (NEDSS)-based logical data model to support the MDHHS-Health public health surveillance system. The MDSS provides a web-based disease surveillance application that allows for electronic capture of disease data, case assignment and tracking, addition of public health case investigation data, and data export. The MDSS provides all Internet-connected local health departments, hospitals, laboratories, and private providers with a means to electronically (or if necessary, manually) submit NEDSS-compliant information regarding reportable diseases and events. Electronic laboratory disease reporting is also supported.

Multiple reporting sources are integrated into an electronic investigation workbook. Demographic data contained in each potential case is duplicated to ensure the system contains a set of unique patient demographics. The MDSS geocodes all encountered addresses. Geographic Information System (GIS) mapping is integrated into case screens, and into reporting. Summary and detail reports can be made available. The MDSS has increased the MDHHS-Health's ability to identify and track emerging infectious diseases and potential bio-terrorist attacks, investigate outbreaks, and monitor public health trends.

Health Alerts. The MDHHS-Health has implemented the Michigan Health Alert Network (MIHAN) to enhance the State's emergency public health communications and connectivity. The MIHAN is part of a statewide integrated information and communications system that serves as a platform for communicating health alerts, prevention guidelines, and national disease surveillance, and electronic laboratory reporting. It is used by the MDHHS-Health to support and strengthen bio-terrorism, public health and medical emergency preparedness and response at the local, state, and federal levels. The MIHAN provides role-based alerting and permissions, secure web-based communication, and bi-directional alerting with message confirmation by telephone, email, and text pager, plus broadcast facsimile capabilities. The MIHAN serves as a foundation for integration of public health and emergency response partners throughout Michigan plus tribal health centers, border states, Canada, and federal agencies including the CDC.

BioWatch. The MDHHS-Health developed the Michigan BioWatch Response Plan in coordination with the MSP/EMHSD, EGLE, FBI, and local EMCs and public health coordinators in southeast Michigan. The BioWatch project–a national EPA/CDC environmental sampling program–is designed to rapidly identify the threat of selected airborne infectious agents. (The MDHHS, in collaboration with the MSP and local public health departments, has developed a communication and response plan in the event positive samples are obtained.)

Initial Incident Reporting and Assessment. As stated in the Information and Planning ESF, the MI CIMS is used by affected MSP Posts (pursuant to Official Order No. 3), state departments/agencies, and local (county and municipal) emergency management program jurisdictions to initially report to the MSP/EMHSD disasters or emergency situations that have the potential to develop into a disaster. (Refer to the Information and Planning ESF for additional details on initial incident reporting and assessment.)

Initial Notification of a Terrorist Attack. When information regarding a terrorist attack is received by the MSP and/or other state departments/agencies, the MSP Director (State Director of Emergency Management and Homeland Security) will be notified and will coordinate potential response actions with the Governor's Office, the MSP/EMHSD, and with appropriate federal and state departments/agencies via secure means. Notifications will be accomplished using secure means in accordance with the NTAS (**TAB E**) and other established protocols. (The MSP is aware that initial notification of a terrorist incident involving a WMD may be in error. Protocols that address this possibility and specific indicators of actual WMD attacks will be consulted. However, due to the potential consequences of a WMD attack, dissemination of notification information will not be considerably delayed while attempting to validate the attack.)

When the initial attack notification comes from a local jurisdiction, the MSP/MIOC will immediately notify the NOC of this potential incident and will ensure that the FBI JTTF/Detroit Field Office is also expeditiously notified and provided essential elements of information in accordance with established protocols. These agencies will subsequently notify all appropriate federal agencies. The MSP Director and MSP/EMHSD may partially or fully activate the SEOC to monitor and support response operations, to orchestrate protective measures for critical state infrastructure, and to facilitate communications and coordination with involved federal and state departments/agencies, local and tribal governments, the private sector, and the public.

Public Information in a WMD Attack.

Principles Regarding Public Information. The intent of terrorism is to produce catastrophic attacks that cause large numbers of casualties and/or property damage, generate chaos, confusion and public panic, and stress local, state, and federal response resources. Accordingly, several guiding principles apply to public information during the response to an act of terrorism:

Accurate and timely information, disseminated to the public and media immediately and often over the course of the response, is vital to provide protective action guidance and to minimize the potential for the involved terrorists to accomplish their objectives.

A well-coordinated and integrated effort by involved local, state, and federal departments/agencies and tribal governments will be used to disseminate public information.

Sensitive law enforcement information may be protected during the investigation of the incident due to the criminal aspects of the case.

Parameters may have to be established regarding media coverage of the terrorist incident to avoid placing lives and property at greater risk or impeding the resolution of the situation.

Overall Coordination Strategy. A critical element in building a successful strategy among federal, state, local, and tribal incident communication leaders is to reach consensus as soon as possible on the coordination and synchronization of

incident communications with the public. In keeping with the Joint Information Team (JIT) concept, state, local, and tribal authorities will take a lead incident communications role for their respective jurisdictions. The federal core group will coordinate communications covering federal assistance to the affected area, the federal response, national preparations, protective measures, impact on non-affected areas, and federal law enforcement activities. Mutual agreement and maintenance of this relationship will remain a high priority throughout the incident.

Initial Public Information. Initial public information regarding immediate protective actions and the effect of the attack is normally the responsibility of local government. However, special considerations must be taken into account for terrorist attacks, as they involve a crime and criminal elements. Public Information Officers (PIOs) at the local level should coordinate initial press releases with the MSP/EMHSD District Coordinator and local Resident Agency FBI official. As the situation evolves and the response matures, the initial structure for managing the release of information to the public will transition into a larger and more integrated system, as addressed below.

Joint Information Center (JIC). In accordance with the Information and Planning ESF, early in the response to a terrorist attack the MSP/EMHSD and SPIO will work with involved departments/agencies and organizations to establish a JIC in close proximity to the location of the attack. The JIC is a physical location where public affairs/information professionals from organizations involved in incident management activities can work together in a coordinated manner to provide critical emergency information, crisis communications, and public affairs support. The JIC serves as a focal point for the coordination and dissemination of information to the public and media concerning incident prevention, preparedness, response, recovery, and mitigation. The JIC may be established at an on-scene location (if incident conditions allow such close proximity); more likely it will be established at (or virtually connected to) the JFO.

Joint Information Center (JIC) Operations. For terrorist attacks, the federal JFO Coordination Staff will normally take the lead in establishing a JIC in coordination with the FBI and DHS/FEMA, the MSP/EMHSD and SPIO, and other involved departments/agencies and organizations. As indicated above, the JIC will likely be located at or near the JFO; however, in some circumstances it may be established at a pre-designated state JIC location. The JIC will develop, coordinate, and disseminate unified news releases. News releases will be cleared through the JFO Coordination Group to ensure consistent messages and avoid the release of conflicting information. This formal approval process for news releases ensures protection of law enforcement sensitive information. Individual departments/agencies and organizations may issue their own news releases related to their policies, procedures, programs, and capabilities; however, these will be coordinated within the JIC to ensure content consistency.

Joint Information Center (JIC) Organization. The JIT, comprised of PIOs from each governmental department/agency and private sector organization involved, will operate from the JIC to facilitate the release of accurate and timely information to the public. In most incidents, the federal lead will be the DHS PIO. The state lead will be the SPIO or a designee.

Typically, the following elements will also be represented in the JIC:
FBI PIO and staff.
DHS/FEMA PIO and staff.
Other federal department/agency PIOs, as appropriate.
Local and tribal PIOs.
Support NGO PIOs, as appropriate.

Homeland Security Information Network (HSIN). The HSIN provides the federal incident communications team with an encrypted online, web-based system for record communications, chat room capability, and a real-time capability to post and review documents. The HSIN also is used by the NOC to coordinate homeland security operations with interagency participants. The DHS Public Affairs manages access, account support, and administrative issues relating to the HSIN for public affairs coordination.

Emergency Alert System (EAS). The EAS is the established vehicle for disseminating emergency information to the general public at the local, state, and national level. Depending on the nature and circumstances of the attack, the MSP/EMHSD may activate the EAS to ensure timely and accurate information is provided to the general public. (Refer to the Warning and Communications ESF.)

Local Public Information Planning. Local (including tribal) public information planning should address the initial phase of the response before state and federal resources arrive at the scene. Such plans should be prepared jointly with media representatives to ensure they have an understanding the unique considerations when reporting on terrorist incidents–especially those involving the use or potential use of a WMD. The local public information plan should include:

Procedures to provide essential information regarding the incident to all responding departments/agencies and organizations.

Lists of subject matter experts for availability during an incident.

The testing and coordinating of emergency broadcast systems.

Appropriate pre-scripted information materials and press releases, including public service announcements and health advisory information.

Procedures for providing initial and ongoing information to protect the public, ensuring that public information and warnings are disseminated in a multi-lingual format based on the ethnic diversity in the area where notifications will be issued, and that they address appropriate functional needs populations.

Procedures to ensure the accuracy of news releases by the media.

Damage Assessment in a WMD Attack.

Considerations Regarding Damage Assessment. A prompt and comprehensive assessment at the scene of the attack is necessary to protect the health, safety, and welfare of emergency responders and the general public. General damage assessment procedures are addressed in the Information and Planning ESF. Key considerations for damage assessment operations following terrorist incidents include:

There may be a variety of public safety, health, and environmental hazards and risks present at suspected, threatened, and actual sites of terrorist attacks.

The hazards at the scene may not be apparent to emergency responders.

The hazards may pose significant short- and long-term health, environmental, physical, and economic consequences onsite as well as offsite.

The assessment process will involve the gathering of pertinent information through observation, investigation, and the use and application of technical knowledge and resources.

Supplemental Damage Assessment Assistance. The Michigan Rapid Impact Assessment Team (MRIAT) can provide supplemental damage assessment assistance to local jurisdictions for all types of emergencies and disasters. The MRIAT could possibly provide assistance in assessing the nature, scope, magnitude, extent of damage and impact, and anticipated duration of a WMD attack. While the MRIAT does not have the expertise or equipment to identify particular agents that might be used in a WMD attack, it could help determine actual/potential damage and impacts once the appropriate response elements (e.g., biological laboratories, hazardous material teams, regional response teams, etc.) identify the agent involved and the scene is stabilized.

(Refer to **TAB F** for a listing of federal response support assets that could possibly assist local and state departments/agencies in identifying the particular type of agent used in a WMD attack.)

Assessment Process. In the event of a WMD attack where there are mass casualties and/or significant property damage has occurred, the MRIAT will conduct assessment operations with the assistance of the technical experts from various state and federal departments/agencies as described above. The MRIAT and the federal support elements will conduct appropriate sampling and monitoring operations to ensure public (and responder) safety and to address onsite and offsite environmental concerns. The assessment process will generally consist of these six components:

Identification of any substance in the air (e.g., toxic, corrosive, asphyxiant) that may be immediately dangerous to the life and health (IDLH) of emergency responders and/or the public.

Identification of any other hazards in the area that could endanger emergency responders and/or the public (e.g., structural hazards, potential explosives, flammable materials, etc.).

Potential or actual off-site consequences of the identified hazard(s).

Characteristics of the site (e.g., geography, topography, meteorology, development patterns, etc.) that may impact response and recovery operations and/or the safety of the public.

Identification of facilities, infrastructure, critical systems, community groups, essential services, etc. that may be (or have been) affected and the level of damage/impacts.

Information that may assist in identifying the type of tactics, hazards, and risks confronting responders and those involved in recovery operations.

Damage Assessment Reporting. Damage assessment information will normally be reported to the MSP/EMHSD using the MI CIMS, as described in the Information and Planning ESF. However, for security reasons the SDEMHS and/or MSP/EMHSD may require that damage assessment reports for WMD attacks be submitted via the LEIN or other secure means. The MSP/EMHSD will provide specific guidance regarding secure submittal of information, as needed.

Health and Environmental Protection Concerns in a WMD Attack.

Health Organization and Responsibilities. The MDHHS-Health is the lead state department/agency for managing and orchestrating bio-terrorism event planning for public health response operations. The MDHHS Bureau of EMS, Trauma, and Preparedness (MDHHS/BETP) is responsible for organizing and directing certain response measures at the regional level. Plans and protocols developed for public health response are coordinated with the MSP/EMHSD and incorporated, where appropriate, into the MEMP. Key health related response elements for WMD attacks include:

Michigan Department of Health and Human Services/ Bureau of Ems, Trauma & Preparedness (MDHHS/BETP). The MDHHS/BETP will activate the Community Health Emergency Coordination Center (CHECC) upon notification of a potential or actual terrorist incident within or adversely affecting Michigan. The CHECC will immediately establish communications linkages with the MDHHS-Health EMC in the SEOC and prepare to support the overall response. The MDHHS-Health EMC will serve as liaison to the SEOC to coordinate the public health response with other involved state departments/agencies.

If the WMD attack involves bio-terrorism and the infectious agent is determined to be food borne or zoonotic (transmitted to people by animals), the MDHHS-Health will coordinate with the MDARD to determine appropriate surveillance activities and to notify local public health departments of appropriate response procedures. If the infectious agent is transmitted by water, the MDHHS-Health will coordinate with the EGLE to initiate appropriate surveillance activities and to notify local public health departments of appropriate response procedures. In consultation with local public health departments, the federal CDC, the MSP/EMHSD, and MDAG, the MDHHS-Health will assess the need to implement legal authorities to control the spread of disease and reduce the risk of additional exposures.

State Resources. The MDHHS-Health has the following assets for WMD attack preparedness and response: Strategic National Stockpile (SNS) advisors, the Michigan Epidemiologic Response and Investigation Team (MERIT), health care worker response teams, and Smallpox Response Teams (SRTs), Michigan Mortuary Response Team (MI MORT), and the Michigan Transportable Emergency Surge Assistance (MI TESA).

For the purposes of WMD attack preparedness and response, the MDHHS/BETP has adopted the eight MSP districts (a.k.a., regions) as its eight geographical regions of operation. (See the map of MSP districts in the “Emergency Management System” section.) Each region has the following assets for WMD attack preparedness and response: a full time and part time Regional Healthcare Coalition Coordinator, a part time Medical Director, and a regional Epidemiologist. In addition, each local health department jurisdiction employs an Emergency Preparedness Coordinator to work with their respective local Emergency Management Coordinator, the regional healthcare coalitions, and community mental health service providers to ensure a coordinated public health response.

In a WMD attack involving bio-terrorism, the MDHHS/BETP will work with the respective state, regional and local assets to implement appropriate surveillance, monitoring, and response actions.

Michigan Emergency Preparedness Pharmaceutical Plan (MEPPP). The MEPPP contains information on local, regional, state, and federal pharmaceutical caches. It provides critical information on the type of caches, target recipients, content, deployment, and availability to ensure prompt identification and distribution of resources during an incident. During a large-scale incident, these medical countermeasures will be dispensed through a coordinated local, regional, and state system that includes, but is not limited to, local health departments and hospitals.

Michigan Emergency Drug Delivery and Resource Utilization Network (MEDDRUN). The MEDDRUN can be used in response to various bio-terrorism agents, including cyanide, nerve agents, organophosphate pesticides, toxic industrial chemicals, radiological dispersion devices, and biological agents such as anthrax and plague. This program provides standardized caches of medications and supplies, called MedPacks. Each MedPack contains resources to treat approximately 100 casualties. MedPacks are state resources that contain antibiotics, chemical antidotes, and other

pharmacologic countermeasures, critical medical supplies, and personal protective equipment such as N-95 respirators and gloves. MedPacks are pre-distributed and stored at rotary air and select ground EMS agencies to minimize deployment time when needed during an incident. The goal of the MEDDRUN is to rapidly deliver these medications and supplies to hospitals and/or to the scene of a mass casualty incident within one hour of a request. This is critical as the need to provide nerve agent antidotes and certain other medical resources is extremely time-sensitive.

CHEMPACK. This resource is supplied by the federal CDC and is managed by the MDHHS-Health. It is a supplemental source of pre-positioned nerve agent antidotes and anti-convulsive medications that are readily available for use when local supplies become depleted. CHEMPACK can be used to treat nerve agents and organophosphate exposures during a large-scale incident. It does not contain medical countermeasures to treat patients with other chemical exposures.

Federal Response Support Assets. A number of specialized medical and health care related assets are available from various federal departments/agencies (see **TAB F**). Requests for these federal assets will be made by the MDHHS/BETP, through the SEOC and in coordination with the MSP/EMHSD and Governor's Office.

Strategic National Stockpile (SNS). The SNS is a national repository of pharmaceuticals and medical supplies, maintained by the federal CDC, for response to public health disasters and mass casualty incidents. The MDHHS-Health coordinates the SNS program in Michigan and maintains the State of Michigan Strategic National Stockpile Plan. This plan details how the State of Michigan will request, receive, stage, store, and distribute SNS resources to local distribution nodes and treatment centers. Several state departments/agencies are involved in the SNS procurement and/or distribution process. Local health departments are responsible for dispensing SNS materiel to the public. (Refer to the "Mass Care" section for additional details on SNS deployment.)

Protection of Survivors and Medical First Responders.

Initial Diagnosis and Reporting. It is likely that the index case of a bio-terrorism event will present itself at the office of the survivor's personal physician or at the emergency department of the survivor's servicing medical treatment facility. Rapid clinical diagnosis and reporting by the servicing physician is of paramount importance to improve the likelihood of disease containment.

Patient Isolation. If EMS personnel believe a patient is displaying symptoms of a bio-terrorism attack while enroute to a medical treatment facility, they must notify the emergency department so that the patient can be isolated upon arrival at the facility. Personal protective measures will be taken by the EMS personnel. Patients should be transported directly to a room pre-designated for airborne isolation if the patient is suspected of having a contagious disease that can be spread through respiration. If the facility does not have such a room, the patient should be isolated from other patients and staff as best as possible pending clinical evaluation.

Facility Quarantine. If a suspected case of bio-terrorism is properly identified, triaged, and isolated at a medical treatment facility, it will not be necessary to place the facility under quarantine or to discontinue medical services.

Perimeters. Perimeters may be used to control access to the affected area, target public information messages, assign operational sectors among responding organizations, and assess potential effects on the population and the environment. Control of these perimeters may be enforced by different authorities, which will impede the overall response if adequate coordination is not established.

Contaminated Area Entry. If appropriate personal protective equipment (PPE) is not available, entry into a contaminated area (i.e., hot zone) may be delayed until the material dissipates to levels that are safe for emergency response personnel or appropriate PPE is available. Questions regarding biohazard contamination and disinfecting will be communicated through the MDHHS-Health.

Secondary Devices. Responders should be prepared for secondary devices.

Multi-Hazard/Multi-Agent Triage.

Decontamination. Following triage, diagnosis, and isolation of a patient, medical staff must ensure appropriate decontamination measures are taken. Guidance for decontamination and appropriate personal protective equipment required is provided by the CEC and MDHHS-Health.

Treatment Sites. MDHHS-Health has developed an alternate care site plan in collaboration with the regional healthcare coalitions and LHD's to address medical surge that may be associated with a CBRNE incident. This plan is an annex to their EOP.

Medical Surveillance and Reporting.

Disease Surveillance. The MDHHS-Health through the Bureau of Disease Control, Prevention, and Epidemiology manages several disease surveillance systems to detect and monitor public health threats, and communicate them to the appropriate partners/agencies. Strategies for local public health departments following the receipt of an atypical report of a disease or outbreak include report evaluation, appropriate notification, and active surveillance.

Local Coordination. If an act of bio-terrorism is suspected, the involved local health department will coordinate with the Regional Epidemiologist to initiate immediate active surveillance for additional suspected, probable, and confirmed cases.

Communicating with Reporting Sources. The MDHHS-Health and local health departments maintain redundant mechanisms for communicating with reporting sources, including:

The Michigan Disease Surveillance System (MDSS).
Broadcast facsimile.
Listserv.
The Michigan Health Alert Network (MIHAN).

Disease Reporting to Local Health Departments. The local health department is the established centralized contact point for initial reporting by hospitals, clinics, private physicians, etc., of suspected, probable, and confirmed cases. This centralized reporting point will be communicated to all potential reporting sources. The reporting sources will be advised by the local health department to immediately report suspected, probable, and confirmed cases so that activities for disease confirmation, isolation, and contact identification and tracing can be initiated. Multiple reporting mechanisms are available to reporting sources and include:

- Secure facsimile.
- The MDSS.
- Direct telephone reporting.
- Email transmissions.
- Hand-carried reports.

Disease Classification. The MDHHS Bureau of Laboratories provides rapid screening as well as diagnostic and analytical testing services for biological agents in human specimens and food, water, or environmental samples. The Bureau of Laboratories also conducts rapid analytical testing for chemical agents in human specimens due to an accidental, intentional, or natural exposure. Laboratory services are coordinated with the local health departments, the Bureau of Disease Control, Prevention, and Epidemiology, MDARD, EGLE, the MSU Veterinary Diagnostic Laboratory, and other state and federal agencies. In addition the Bureau of Laboratories provides laboratory support to several federal bio-surveillance systems including but not limited to; Bio Watch, Food Emergency Response Network, and the U.S. Postal Service Biohazard Detection System to detect anthrax in the mail.

Reporting to the CDC. The MDHHS-Health coordinates and communicated appropriate surveillance and monitoring activities to the CDC as required by each station. Reporting requirements are situation dependent. Local/regional surveillance staff will actively contact major reporting sources (e.g., hospitals, clinics, or other identified treatment facilities) at least daily to ensure timely reporting as appropriate for the situation. Confirmed contact lists will be provided to those personnel responsible for tracing, prophylaxis, and follow-up on contacts. The MDHHS-Health will immediately report out-of-state contacts or places to the CDC. The MDHHS-Health will report surveillance data to the CDC on a daily basis, as needed.

Long-Term Surveillance. Surveillance activities may continue to assess long-term health effects after exposure to a specific infectious agent.

Mass Care (Function of ESF 6)

Medication Procurement/Distribution. If a serious and/or widespread outbreak of infectious disease occurs, the MDHHS Chief Medical Executive is responsible for coordinating the procurement and distribution of medications to local health departments to prevent the spread of disease–thereby reducing morbidity and mortality within the population. Application of medical prophylaxis requires identification of the populations at risk. As this may not happen immediately, treatment

may be given to a larger number of people than necessary ("worried well") until active surveillance activities define the population at risk.

Requesting Strategic National Stockpile Assets. No one can anticipate exactly where an incident may occur, and few agencies have the resources to create a sufficient pharmaceutical stockpile on their own. Local health departments, hospitals, and the MDHHS-Health have access to limited supplies of pharmaceutical inventories. However, the CDC's Strategic National Stockpile (SNS) – a national repository of pharmaceuticals and life-saving medical materials – can be rapidly delivered to a site of a biological or chemical terrorist attack.

The SNS resources have been divided into "12-Hour Push Packages" that are maintained in pre-packaged, pre-positioned caches in secure storage facilities around the country. The Push Packages are designed to be deliverable to any area of the continental U.S. within 12 hours of deployment, with substantial supplies to address a wide variety of potential needs. The Push Packages contain pharmaceuticals, intravenous supplies, airway supplies, emergency medication, bandages and dressings, and other materials to cover a spectrum of medical needs. Each Push Package involves several truckloads of materials and is intended to be sufficient to respond to a mass casualty incident. During a deployment, SNS technical advisors will be present at the scene to ensure the transfer of SNS assets to authorized state representatives and to provide assistance as needed.

The Governor is responsible for requesting activation of the SNS, upon recommendation of the MDHHS Chief Medical Executive and in consultation with the MSP/EMHSD and other involved departments/agencies.

Hospitals. Healthcare facilities and hospitals have developed medical surge plans to respond to the increased number of patients that may present during a public health emergency resulting in mass casualties. The regional medical coordination centers will work with hospitals and MDHHS CHECC to coordinate regional and statewide resource sharing and additional identified needs that may occur. The MDHHS-Health EMC is the link between the CHECC and the SEOC for situational awareness, information sharing, and processing resource requests.

Supplementary Medical Professionals and Technicians. The MDHHS BETP is responsible for supporting and coordinating the deployment of volunteer health professionals for emergency response. In the event of a local, regional, state, or national emergency, certain information must be collected and verified to assure accuracy, appropriateness, and effectiveness for mobilization of volunteers. To accomplish this, the office operates the MI Volunteer Registry, and internet-based system enabling healthcare personnel and residents to pre-register to volunteer their assistance during an emergency. The registry assembles volunteers based on verification of their identity, credentials, and qualifications. The BETP also provides the Medical Reserve Corps State Coordinator.

Public Health Authorities for Quarantine and Controlling Medical Treatment Facilities.

Public health code/federal statutes. Authorities included in the public health code (1978 pa 368, as amended) extend extraordinary powers to state and local public health officials to protect the general public. Additionally, federal CDC guidelines also specify that, "if existing local or state public health statutes do not allow for implementation and enforcement of appropriate isolation and quarantine measures, federal public health statutes for the control of infectious disease may be applied to assist local and state authorities in implementing the necessary outbreak control measures."

Isolation measures. Highly communicable biological agents require immediate isolation of infected individuals as an essential component of an effective public health response. Isolation is critical to prevent the spread of disease. Isolation of a possible case will also provide a sufficient time to assure appropriate isolation measures are in place at the onset of an infectious period.

Quarantine/travel restrictions. Both the public health code and the emergency management act provide authorities to implement measures to protect the public health and welfare – up to and including quarantine and travel restrictions. The MDHHS-Health and health officers in local health departments, under the threat of "imminent danger" can implement "in residence" or "general" quarantines and travel restrictions, respectively, to manage the initial states of an outbreak. Similarly, the emergency management act empowers the governor (upon the declaration of a state of disaster or state of emergency) to "control ingress and egress to and from stricken or threatened areas, removal of persons within the area, and the occupancy of premises within the area" – which implies the power of quarantine and restriction of travel. The act also authorizes the chief executive official of an affected county or municipality to "issue directives as to travel restrictions on county or local roads" and to "provide for the health and safety of persons and property".

However, even with legal authority, establishing a general quarantine of a political subdivision or group of subdivisions of the state is a sensitive issue. It is one that requires due deliberation and consultation at the highest levels of local, state, and federal government. The decision must weigh the potential for public panic and psychological distress against the

importance of containing the outbreak. It also carries with it the concern over potential outcomes associated with enforcement regimes. Accordingly, the MDHHS director, in consultation with the MDHHS/BETP, MSP/EMHSD, Federal CDC, the involved local health department(s) and other state and federal departments/agencies, will recommend to the governor when a general quarantine of a municipality, county, or region is determined essential for the preservation of health among the general public in the aftermath of a WMD attack.

Immediate measures. In the event of even one confirmed case of a bio-terrorism agent, an immediate public health action is warranted. Measures that could be implemented include appropriate isolation of the known or presumed infected individual and initiation of active epidemiologic investigation, contact tracing, treatment with prophylaxis, and enhanced surveillance. Quarantine measures are designed to restrict movement of larger groups of individuals but are generally defined as a population-wide activity.

Decontamination Operations

Patient Transportation. Decontamination operations must be tailored to the situation and agent involved. Transportation of suspected, probable, or confirmed patients with a bio-terrorism agent must adhere to basic procedures for safeguarding health care workers, hospital/clinic staff, other patients, and the general public.

Infection Control. Specific infection control procedures should be followed within the medical care facility as it applies to use of equipment, disposable supplies and materials, bio-hazardous waste, and laundry/linen.

Mental Health

Mental Health Code. The Community Mental Health Services Program (CMHSP) is established by the Mental Health Code. Local boards provide crisis intervention, outpatient counseling, and case management. As the gatekeeper of the public mental health system, the local community mental health program provides individualized planning for the mental health care of county residents.

Rapid Implementation of Services. A bio-terrorism attack can be expected to produce a level of fear and panic among the affected population that exceeds what is normally experienced in other types of disasters. It is important that mental health programs for the public be quickly established to assist in dealing with the psychological impacts of an incident. The American Red Cross, MDHHS-Health, and the National Child Traumatic Stress Network recommend that all response workers receive training in Psychological First Aid to support personal and community resilience. Similarly, emergency response personnel may require Critical Incident Stress Management (CISM) assistance. The Michigan Crisis Response Association (MCRA) can assist in providing CISM intervention to responders impacted by traumatic events. There are approximately 56 teams in Michigan whose membership is comprised of individuals from law enforcement, fire and emergency medical services, hospital staff, educators, mental health professionals, and clergy. The MCRA can also provide assistance to communities in developing crisis response plans. The DTMB also provides Traumatic Incident Stress Management Services to State of Michigan Employees upon request.

State/Federal Assistance. The MDHHS, Bureau of Developmental Disabilities and Substance Abuse, as Michigan's designated State Mental Health Authority, will work with the CHECC and the MDHHS-Health EMC in coordination with the MSP/EMHSD in the application for and implementation of the supplemental federal mental health assistance Crisis Counseling Program (CCP) if incident assessments indicate the need.

Environmental Protection. Environmental protection procedures that will be implemented following a WMD attack are generally similar to those employed for naturally occurring contamination/disease outbreaks. Given this, the following WMD attack procedures pertain to the various sectors shown:

Agriculture and Food. Approximately one-fifth of the U.S. Gross Domestic Product stems from the agricultural industry, and Michigan ranks nationally in several agricultural sectors. The importance of agriculture and the food supply makes them attractive targets for terrorists who may wish to damage the U.S. economy and/or generate fear and panic among the population. There are three primary sectors of Michigan's agriculture and food industries:

Supply chains for feed, animals, and animal products.
Crop production and supply chains for seed, fertilizer, and other related materials.
Post-harvesting components of the food supply chain, from processing, production, and packaging through storage and distribution for retail sales, institutional food services, and restaurant or home consumption.

Given the requirement to protect the above sectors, the following will be implemented when appropriate to protect agricultural and food products:

Detection. Rapid analytical tools and methods will be employed to detect bio-terrorism agents in food products. Laboratories having the appropriate capabilities will be used to identify various traditional and non-traditional agents.

Tracking Animals and Commodities. Animals and commodities are often transported over long distances and spend time in storage areas where they come into contact with products. Coordination will be maintained with trucking and transportation systems to address safety and security to protect such commodities, as well as to implement tracking systems to pinpoint where an outbreak or contamination originates.

Rapid Information Sharing. Rapid acquisition and use of threat information will assist in preventing an attack from spreading beyond individual facilities or local communities to become a regional, state, or national problem.

Water. The water sector is a critical infrastructure from both a public health and an economic standpoint. There are four primary areas of concern:

Physical damage or destruction of critical assets, including intentional release of toxic chemicals.
Actual or threatened contamination of water supplies.
Cyber-attack on information management systems or other electric systems.
Interruption of services from another infrastructure.

Given the above focus areas, the following will be implemented when appropriate to protect water systems:

Improving site security at high priority sites.
Implementing monitoring and analytical technologies and capabilities.
Coordination of emergency response protocols with local and federal departments/agencies.
Implementation of redundant systems when service from another critical infrastructure is lost.

Chemical Industry/Hazardous Materials. The chemical industry/hazardous material sector is a critical infrastructure from both a public health and an economic standpoint. There are two primary areas of concern:

Promoting enhanced site security.

Implementing controls on the sale and/or distribution of pesticides and other highly toxic substances.

Human Service Concerns in a WMD Attack. Although general procedures for providing human services following a WMD attack may be similar in many respects to those for other disasters or emergencies, there are still a number of important considerations that may have to be addressed:

Displaced Populations. Increased security for concentrations of displaced populations should be ensured.

Communicable Diseases. Depending on the type of WMD attack, temporary mass shelters should include medical screening and surveillance of evacuees.

Functional Needs Populations. State departments/agencies (e.g., MDHHS, MOSA) that administer programs for the elderly, disabled/handicapped individuals, non-English speaking individuals, etc. must ensure that the functional needs associated with such populations are considered during response operations (e.g., protective actions, sheltering, emergency transportation, public information). The involved department/agency EMCs (or SEOC representatives, if not the EMCs) are responsible for bring these functional needs to the attention of other responding departments/agencies so that appropriate and timely measures can be taken.

Donations Management. The widespread effects of a WMD attack could require resource support from intrastate and interstate assistance compacts (i.e., local mutual-aid, MEMAC and EMAC), federal departments/agencies, NGOs, and in some instances international agencies and governments. Management of solicited donations of resources will normally be handled in the SEOC by the Operations, Logistics, and Finance and Administration Sections, and the Resource Support and Human Services ESFs under the MI CIMS. Management of solicited donations generally is not problematic because the donations have been specifically requested by a state department/agency, are usually targeted to a specific area in need or a particular use, and the logistical aspects of the donations (e.g., transportation, receipt, storage, distribution, etc.) have been properly addressed by the requester and the sender.

Unsolicited donations, on the other hand, can cause significant management and logistical problems and can adversely affect response and recovery efforts if the problem is not dealt with in a timely manner. Because of the nature of the

situation, unsolicited disaster donations may be a major issue in the aftermath of a WMD attack. The Michigan Disaster Logistics and Donations Management Plan, MSP/EMHSD Publication 107–a support plan to the MEMP–provides a detailed framework for establishing and implementing a major disaster donations management operation. Because many local jurisdictions in Michigan may not have a detailed local disaster donations management plan, state assistance in donations management will likely be required. The Michigan Disaster Logistics and Donations Management Plan will be implemented by the MSP/EMHSD and MDHHS-Human Services, under the umbrella of the Human Services ESF, if it becomes apparent that a donations management operation will be required. (Refer to the Michigan Disaster Logistics and Donations Management Plan.)

Resource Support Concerns in a WMD Attack. Resources to support crisis and consequence management response to a WMD attack may be provided by governmental departments/agencies, NGOs, and the private sector:

Local Support. Mutual-aid agreements between local jurisdictions exist in many areas of the state. In addition, some local jurisdictions are participants in the Michigan Emergency Management Assistance Compact (MEMAC), which facilitates the rendering and receipt of local and state assistance in time of crisis. (Refer to the Resource Support ESF for more information on the MEMAC.) Normally, such resources will be the initial source of supplemental support and assistance to arrive on the scene. In addition to established emergency response agencies, resources that may be available at the local level include:

Metropolitan Medical Response Systems (MMRS). The MMRS operate as a specially-organized team and are capable of agent detection and identification, patient decontamination, triage and medical treatment, patient transportation to hospitals, medical and mental health care, and coordination with local law enforcement activities. Michigan has MMRS in the cities of Detroit, Grand Rapids and Warren.

Local Emergency Planning Committees (LEPCs). Michigan has designated LEPCs for each Michigan county and for several major municipalities. The LEPCs develop and maintain emergency response plans for facilities in their jurisdiction that are subject to SARA Title III emergency planning requirements for hazardous materials. Many LEPCs have also addressed counterterrorism and have incorporated the protection of critical infrastructure into their emergency response plans. If any of these critical infrastructures are threatened or vulnerable in a WMD attack, the LEPC plans may have provisions in place to protect the infrastructure during an emergency response. In this regard, infrastructure protective measures can be initiated immediately after an attack has begun as well as before it happens.

State Support. The following state assets are available to support local response efforts in a WMD attack:

Regional Response Team Network. The RRTN consists of geographically positioned Regional Response Teams (RRTs) that can provide support to a WMD attack anywhere in the state within several hours or less. The RRTs are composed of four functional elements: 1) emergency medical operations; 2) hazardous materials operations; 3) logistics support; and 4) force protection. Other response elements (i.e., RRTN augmentation elements) include the Michigan Urban Search and Rescue (MUSAR) Team, the Michigan National Guard's 51st Civil Support Team (see below), the MSP Emergency Support Team, MSP Canine Unit, MSP Dive Team, MSP Aviation, and the MSP Bomb Squad. The RRTN's specific mission is to respond to an actual or suspected CBRNE weapons event anywhere in the State of Michigan in a rapid, efficient, and effective manner to provide operational support to the local Incident Commander. The RRTN can provide technical assistance and a variety of support services, including but not necessarily limited to: 1) scene reconnaissance, assessment, stabilization, and rescue; 2) crime scene and evidence preservation; 3) mass decontamination; and 4) liaison with the FBI and other involved federal departments/agencies. The RRTN is activated through MSP Operations.

Michigan Epidemiologic Response and Investigation Team (MERIT). The MERIT was created by the MDHHS-Health to provide a quick response capability to bio-terrorism attacks and other public health emergencies, and to coordinate resources and expertise at local, state, and federal levels across a wide range of public health disciplines. The MERIT consists of personnel from the MDHHS Bureau of Epidemiology (e.g., Infectious Disease Physician, Communicable Disease Epidemiologists, Public Health Nurse, etc.), MDARD and EGLE, and the FBI (and/or other state/local law enforcement agencies). The MERIT is activated through the MDHHS-Health EMC or the CHECC.

Michigan Urban Search and Rescue (MUSAR). MUSAR is a privately funded organization working in cooperation with the fire service, local emergency management, the MSP, and private sector agencies to provide a statewide capability for specialized response to structural collapse emergencies and incidents requiring specialized training in search and rescue. MUSAR is organized into four specialized teams–a Search Team, a Rescue Team, a Medical Team, and a Technical Team. If a WMD attack involves the structural collapse of a building, MUSAR can provide immediate statewide response assistance upon activation through MSP Operations. The Technical Team can provide assistance in situations involving toxic chemicals.

51st WMD Civil Support Team. Stationed at the Michigan National Guard's Fort Custer in Augusta, the 51st WMD CST was created to augment local and regional terrorism response capabilities in attacks known or suspected to involve WMD. The CST, which consists of highly-trained Michigan National Guard personnel, is capable of being enroute to the site of an attack to support civil authorities within four hours following notification. Specifically, the CST will deploy to an area of operation to: 1) assess a suspected chemical, biological, radiological, or nuclear (CBRN) incident in support of a local Incident Commander; 2) advise civilian responders regarding appropriate response actions; and 3) facilitate requests for assistance to expedite arrival of additional state and federal assets to help save lives, prevent human suffering, and mitigate great property damage. Working in support of the Incident Commander, the CST can verify the perimeter of the exclusion zone and send teams into the "hot zone" to conduct reconnaissance, survey, detection, and sampling missions. The CST is trained to the Hazardous Materials Technician (and above) level and maintains highly specialized technical equipment designed for use with each type of WMD/CBRN. The 51st WMD CST is activated through MSP Operations or the MSP/EMHSD, to the MDMVA Office of Military Support to Civil Authorities. The CST is available on-call 24 hours-a-day, 7 days-a-week.

Regional Public Health Response Teams. Eight MDHHS operational regions have been identified that parallel the MSP/EMHSD emergency management districts (a.k.a., regions). Under this regional system, the MDHHS-Health has established one state-level public health response team (the MERIT – see above), eight Regional Public Health Response Teams (RPHRTs), and approximately 18 health care worker response teams. Members of these teams may also be part of the Smallpox Response Teams (SRTs) located within the eight regions. These teams will allow for the rapid mobilization and utilization of public health and health care personnel for a large-scale response to a WMD attack or other public health emergency. The regional system will also help assure the coordination of efforts across regional lines.

Michigan Rapid Impact Assessment Team. As described in the Information and Planning ESF, the MRIAT is a state-level damage assessment team created to improve the State's capabilities to determine the nature, scope, magnitude, severity, and anticipated duration of emergencies and disasters. Although the MRIAT has limited technical expertise in the area of WMD and its members are not trained or equipped to work in a WMD environment, it could provide supplemental assistance in determining and quantifying the damage, impacts, and resource needs caused by a WMD attack on a Michigan community once the appropriate response elements (e.g., biological laboratories, hazardous material teams, regional response teams, etc.) identify the agent involved and the scene is stabilized. The MRIAT will normally be activated by the MSP/EMHSD, working through the state department/agency EMCs and the Governor's Office. Team activation will normally not exceed 48 hours, although that window of operation may be extended as needed for difficult situations such as would be found in a post-WMD attack environment.

Michigan Department of Agriculture and Rural Development (MDARD) Technical Assistance. If a WMD attack is targeted at or affects plant/animal health or the food supply to the extent that food safety may be compromised, subject matter experts from the various MDARD plant, animal, and food industry regulatory divisions – in cooperation with other involved state and federal departments/agencies (e.g., MDHHS-Health, EGLE, FBI, etc.) – will be mobilized to provide for the surveillance, inspection, and monitoring of the situation. The MDARD experts will be dispatched to the SEOC to provide advice and technical assistance, and to coordinate an appropriate response. The MDARD field staff will provide for the continuous monitoring of plants and animals and the food supply infrastructure to ensure food safety.

The MDARD can also provide on-scene technical advice and assistance on minimizing human and environmental hazards from pesticides used as a WMD and can provide technical advice and assistance in the containment, detoxification, and cleanup of pesticides following the attack.

Michigan Department of Health and Human Services/ Bureau of EMS, Trauma, and Preparedness (MDHHS/BETP) Technical Assistance. The MDHHS CHECC coordinates state and local public health efforts to prevent, prepare for, respond to, and recover from bio-terrorism attacks, outbreaks of infectious disease, and other public health threats and emergencies. The CHECC has a cadre of technical experts that can provide ongoing technical advice and assistance to SEOC staff and to first responders at the scene of a WMD attack.

State Laboratories. In addition to the state public health laboratory in Lansing, the MDHHS Bureau of Laboratories works with four regional affiliate public health laboratories within the state. The MDHHS Bureau of Laboratories will be the lead state laboratory for testing clinical (human) specimens submitted from sentinel hospital laboratories for potential agents used in a WMD attack. The Microbiology Section will be used to confirm the

Support Laboratories. The Analytical Chemistry Section has the capacity to test human samples for indicators of chemical agents used as a WMD. Urine specimens may be tested for nerve agent metabolites, sulfur mustard metabolites, nitrogen mustard metabolites, ricin, and trace metals. Blood specimens may be tested for hydrogen cyanide. The MSP laboratory and the MDLARA/MIOSHA laboratory both have the capability to test clinical specimens of other chemical components.

The MSU Veterinary Diagnostic Laboratory, a special purpose affiliate laboratory provides surge capacity and animal testing laboratories. In an emergency, other state laboratories (e.g., MDARD, EGLE, MDLARA/MIOSHA, and MSP) could assist in the identification and analysis of various suspect agents following a WMD attack.

Laboratory: Clinical Capacities (Human Specimens). The MDHHS laboratory will be the lead state laboratory for testing clinical (human) specimens for potential agents used in a WMD attack. The MDHHS Microbiology Section, along with the MDHHS Upper Peninsula laboratory and the MDHHS regional laboratories in Kent County, Saginaw County, Kalamazoo County, Oakland County, and the city of Detroit, will be used to confirm the biological agents used as a WMD. These clinical isolates will be submitted from sentinel hospital laboratories. The MDHHS laboratory will test clinical specimens for botulinum toxin.

The MDHHS-Health Analytical Chemistry Section has the capacity to test human samples for analyses of MDHHS agents used as a WMD. Urine specimens may be tested for nerve agent metabolites, sulfur mustard metabolites, nitrogen mustard metabolites, ricin, and trace metals. Blood specimens may be tested for hydrogen cyanide. The MSP laboratory and the MDLARA/MIOSHA laboratory both have the capability to test clinical specimens of other chemical components.

Laboratory: Environmental Capacities. The EGLE laboratory will be the lead state laboratory for testing water samples during a WMD attack. The EGLE drinking water laboratory has the capability to test potable and some non-potable water samples. The EGLE environmental laboratory has the capability to extract/digest sediments, water and other liquids, oil and petroleum products, and air collected via air canister, tedlar bags, cartridges, and syringes, and test for a variety of organic compounds. The EGLE laboratory has limited capabilities for testing for specific WMD compounds and will rely instead on the MDHHS-Health, MDMVA 51st WMD CST, and DOD laboratories.

The MDHHS laboratory will be the lead state laboratory for testing environmental specimens for the biological agents used as a WMD in a terrorist attack. Law enforcement officials (specifically the FBI) will prescreen these samples and certify that they are free from explosive and radiological risk prior to initiating the testing procedures. The MDHHS laboratory is also the FDA-designated laboratory for testing food samples for biological agents considered potential agents of terrorism. The MDARD laboratory has the capability to assist by testing food, vegetation, water, and soil samples for a variety of contaminants.

Environment, Great Lakes, and Energy (EGLE) Nuclear Facilities Program. The EGLE is responsible for the development and implementation of Michigan's Nuclear Facilities Emergency Management Plan (NFEMP), as well as the nuclear accident aspects of the MEMP as it relates to the EGLE's radiological responsibilities to respond to accidents or emergencies at any of Michigan's commercial nuclear power plants. These efforts are conducted in cooperation with other state departments/agencies, and under the overall emergency response coordination responsibilities of the MSP/EMHSD. If a WMD attack involves or affects a commercial nuclear power plant in Michigan, EGLE will dispatch a health physicist to the SEOC to coordinate an appropriate response. (Refer to the Technological Disaster Procedures/Nuclear Power Plant Incidents for more detailed information related to response and recovery actions for a nuclear power plant incident.)

Radiological Technical Assistance. If an attack occurs that utilizes nuclear/radiological material as a WMD, such as a nuclear weapon detonation or a radiological ("dirty") bomb, EGLE health physics staff can be dispatched to the SEOC to provide technical assistance and to coordinate an appropriate response. The EGLE staff may also be dispatched to the scene to provide technical advice and monitoring assistance to first responder agencies.

Environment, Great Lakes, and Energy (EGLE) Public Water Supply Safety Technical Assistance. The EGLE, in coordination with the MDHHS-Health, is responsible for the safety of public drinking water supplies in Michigan. If a WMD attack is targeted at or involves a water supply facility or system, EGLE staff will be dispatched to the SEOC to provide technical assistance and to coordinate an appropriate response. The EGLE staff can also respond directly to the scene of the attack to monitor contamination and to work with involved utility system and local/federal health officials to implement appropriate countermeasures to prevent the use of the contaminated water, and to make the water supply safe for consumption.

Interstate Assistance. Michigan is a signatory of the Emergency Management Assistance Compact (EMAC), the interstate agreement that streamlines the assistance one governor can lend another after a natural, technological, or human-caused disaster (including a terrorist attack) by providing a framework for flexible response. The EMAC is an arrangement of the states, by the states, and for the states. It addresses all the issues associated with requesting assistance, reimbursement of services, workman's compensation insurance, and liability in advance of a disaster. The MSP/EMHSD is the state contact agency for activating assistance through the EMAC. Michigan is also a signatory of the Northern Emergency Management Assistance compact (NEMAC). The NEMAC is a congressionally approved State-

Province cross border agreement between jurisdictions in the Central and Prairie regions of the United States and Canada. The NEMAC establishes procedures whereby a participating jurisdiction whose capabilities are exceeded as a result of an emergency can receive and request assistance from other participating jurisdictions in accordance with the State and Province Emergency Management Assistance Memorandum (SPEMAMA). (Refer to the Resource Support ESF.)

Federal Assistance. A number of federal agencies have created highly-specialized organizations and response teams that are specifically aimed at responding to a terrorist WMD attacks. (See **TAB F.**) Normally, such teams are dispatched once a request is received from the state. However, proactive federal response is most likely to be implemented for catastrophic incidents involving a WMD or CBRNE materials.

Public Works and Engineering Concerns in a WMD Attack. Responsibilities of various state agencies for transportation, energy, water and wastewater systems, pipelines, dams, drains, correctional and other public facilities, and debris cleanup are identified in the Public Works and Engineering ESF. Although response procedures for damage / impact to these infrastructures would generally be the same regardless of the cause, there are several factors that must be considered in the event of a WMD attack:

Crime Scene Investigation. State engineers and technical experts may be key in assisting the MSP, FBI, and other federal, state, and local law enforcement agencies in conducting investigations into the cause of the damage and the methodology employed by the terrorist(s) in accomplishing the attack. This information may prove extremely valuable for apprehending the terrorists as well as for preventing future attacks.

Scope of Response Operations. Several factors should be considered regarding support of large-scale evacuations following a terrorist attack:

Scale of the Incident. A large-scale WMD attack, such as using an aircraft to distribute a toxic chemical or weaponized biological agent, could produce a downwind hazard area covering many square miles. Normal evacuation operations in Michigan for most technological and natural disasters are typically less extensive and do not involve such large populations. It is essential that local public works departments/agencies implement response plans and procedures to direct and orchestrate traffic flow.

Secondary Attacks. Additional terrorist attacks could be aimed at the evacuating populations to further disrupt the response and to create chaos. Accordingly, alternative evacuation routes should be considered when primary routes are designated.

Decontamination Operations. The potential exists for evacuees to become contaminated. Therefore, large-scale decontamination operations may be required as a component of the evacuation process. The EGLE will coordinate with the MDHHS-Health, hazardous material teams, and firefighting agencies to establish mass decontamination stations capable of rapidly processing large populations. For biological events, technical support and guidance will be provided by the MDHHS/BETP.

Mass Casualties. Most disasters are randomly occurring incidents that produce casualties numbering in the tens or hundreds of people. Terrorist attacks against populations are specifically designed to produce mass casualties in the thousands to tens of thousands. Alternate care sites may be required to provide medical care or dispensing of pharmaceuticals for very large numbers of survivors in addition to adequate supplies and shelters to treat and temporarily house the casualties. In addition, the MDOC, and DTMB may be required to ensure that supplies and equipment are available when required. (Refer to the Environmental Protection ESF, Health and Human Services ESF, and MDHHS Mass Fatality Management Plan.)

Mass Fatality Management. The MDHHS-Health will coordinate with the MSP, MDMVA, and DTMB to identify and secure the use of cold storage facilities and/or containers for storage of large numbers of human remains. In some instances, decontamination of the remains may be required. (Refer to the MSP/EMHSD Publication 101b: Mass Evacuation and Mass Sheltering Support Plan and MDHHS-Health Mass Fatality Management Plan.)

Critical Infrastructure Protection, Resiliency, Hardening, and Redundancy. Terrorist tactics point to multiple, nearly simultaneous WMD attacks to derive the greatest shock effect on the target population. Accordingly, should an attack against a particular CI occur, the potential for additional attacks must be recognized. Therefore, following an attack on a CI, hardening should be coordinated by various Sector-Specific State Agencies (SSSAs) responsible for oversight/stewardship of Michigan-pertinent CI sectors (e.g., cyber, agriculture, energy, etc.) derived from Homeland Security Presidential Directive (HSPD)-7. If hardening is impractical, redundancies should be identified to ensure resiliency of functionalities of sites and systems. Private business and industry should be encouraged by involved state

oversight agencies to conduct planning for implementation of appropriate measures to prevent, protect, respond to, and recover from terrorist attacks.

Quarantine. In some situations, quarantine may be required to contain a communicable disease outbreak. If that occurs, road closures and restrictions on other transportation systems will be facilitated by the MDOT in coordination with the MSP and appropriate federal Sector-Specific Agencies (SSAs).

Energy. Energy systems include three major components – electricity, oil, and natural gas. Each of these has certain sub-components that are important to consider, as well as specific initiatives that may be suitable for implementation during the pre-incident/emerging threat, response, and/or recovery phases:

Electricity. Key sub-components include generation, transmission and distribution, and control and communications. Specific initiatives to consider for implementation include:

Identify equipment stockpile requirements.
Initiate vulnerability reduction programs.
Implement guidelines for physical security programs.
Evaluate and adjust protection operations and implement system restoration and recovery operations in response to attacks.

Oil. Key sub-components include production, crude oil transport, refining, product transport and distribution, control, and other external support systems.

Natural Gas. Key sub-components include exploration and production, transmission, and local distribution.

Specific initiatives to consider for implementation for oil and natural gas include:

Implement strategies to reduce vulnerabilities.
Implement standardized physical security programs.
Review plans for reconstituting capabilities of critical facilities and systems.
Prepare to locate and arrange for transportation of critical components in support of response and recovery activities.

Public Safety Concerns in a WMD Attack. Responsibilities of various state departments/agencies for basic public safety measures are identified in the Public Safety ESF. In addition to those basic measures, there are several additional public safety measures that should be considered in the event of a significant WMD attack threat or an actual WMD attack:

Cancellation of major events. Depending on the circumstances of the threat or attack, it may be both prudent and necessary to postpone or cancel major public events such as sporting events, concerts and performances, fairs and other celebrations, parades, political rallies/conventions, etc. These events may be attractive targets for terrorists wishing to carry out a WMD attack. The governor has the authority under the Michigan Emergency Management Act to "direct and compel the evacuation of all or part of the population from a stricken or threatened area within the state if necessary for the preservation of life or other mitigation, response, or recovery activities" and to "control ingress and egress to and from a stricken or threatened area, removal of persons within the area, and the occupancy of premises within the area." Such authority may be exercised by the governor upon the declaration of a "State of Disaster", a "State of Emergency", or a "Heightened State of Alert". The emergency management act also provides authority to the chief elected official of a county or municipality to "provide for the health and safety of persons and property" and to "issue directives as to travel restrictions on county or local roads" in the event of a disaster or emergency.

Although these emergency authorities exist, cancellation of major public events is normally handled on a voluntary basis by the event organizers unless circumstances dictate the need for the governor and/or local chief elected officials to institute mandatory cancellation orders to protect public safety and the safety of first responders.

Note: Major private events such as trade shows/conventions, parties, business meetings, etc. would also fall under these same emergency provisions, but cancellation of such events is a sensitive issue that often carries with it significant economic costs that must be considered before such decisions are made.

Closure of Major Institutions. Depending on the circumstances of the threat or attack, it may become necessary to consider temporarily closing public institutions such as schools, colleges/universities, government offices, state parks/recreation areas, public arenas, and stadiums, etc., and possibly even temporarily curtailing some public services such as trash removal and parks and street maintenance. A general, blanket closure of public institutions would require a Governor's Executive Proclamation or order to that effect under the emergency management act, as public schools, public colleges and universities, airports, local government facilities and many other local institutions are autonomous bodies that generally set their own operating schedules and determine their own emergency response procedures. In addition,

major private institutions in affected communities such as shopping malls, industrial complexes, private arenas/stadiums and other entertainment venues, private schools, private colleges/universities, etc. Generally have the same autonomous status.

Closure of major public and private institutions is a sensitive issue that requires due deliberation and consultation between all levels of government, with direct collaboration between law enforcement and intelligence agencies. The decision must weigh the potential economic, social, and operational costs of the facility closures against the importance of protecting the public from undue harm. It also carries with it the concern over potential outcomes associated with enforcement regimes. Accordingly, the MSP Director, in consultation with the MSP/EMHSD, Michigan Attorney General, MDHHS-Health, MDE, MDNR, MDLARA, and other involved state and local departments/agencies, and following thorough coordination with the NOC, MIOC, Detroit JTTF, and local law enforcement where the threat or attack occurred, will recommend to the governor when a general blanket closure (or targeted closure) of public and/or private institutions is determined essential for the preservation of public health, safety and welfare, prior to and/or in the aftermath of a WMD attack.

In some cases, it may be more appropriate for the governor and/or the involved state departments/agencies to issue recommendations for temporary facility closure and/or service curtailment, leaving it up to each targeted institution to determine the best course of action based on the situational circumstances. This option–which could be carried out via executive proclamation/order or individual department/agency guidance–would likely be more well received but may not in some instances be as effective in protecting the public health, safety, and welfare.

Community-wide Protective Actions. Most disasters or emergencies do not require the implementation of community-wide protective actions (evacuation or in-place sheltering) because the damage and impacts are limited in scope and magnitude. However, a WMD attack may have community-wide impacts that would necessitate the immediate implementation of protective actions. The decision to evacuate an affected area or to recommend in-place sheltering will be determined based on the situational circumstances (e.g., agent involved and its lethality, method of deployment and rate of spread, population density, community topography and land uses, etc.) and the likelihood of success of protecting the affected population. In general, in-place sheltering is easier and faster to effectively implement than is evacuation–especially on a community-wide basis. If properly carried out, in-place sheltering can be highly effective in protecting the population from many of the types of agents that might be used in a WMD attack.

The decision about which protective action to implement in a particular situation will be made in the local EOC and will be based, in part, on the input of the MSP/EMHSD District Coordinator and other local, state, and federal officials involved. Depending on the circumstances, the SEOC may be able to provide technical advice and assistance to local officials in making that decision. In extreme cases, the governor may direct and compel evacuation of an affected area or implement in-place sheltering by limiting ingress and egress to and from the area, in accordance with the authorities and provisions set forth in the emergency management act. (Refer to the “cancellation of major events” section above.)

Alternate Water Supply. If a WMD attack contaminates a public water supply to the extent that it is unsafe for public consumption, alternate drinking water supplies will have to be quickly identified and put into place. Environment, Great Lakes, and Energy (EGLE) will be instrumental in determining if such a measure is necessary, with assistance from the local health department and water supply utility. Environment, Great Lakes, and Energy (EGLE), MSP/EMHSD, and DTMB are responsible for identifying possible alternate sources of drinking water and working with the affected community to address the logistical aspects of the distribution operation. Alternate drinking water supplies could be arranged by tapping another local community’s water supply system, bringing in bottled water and/or potable water tankers, enhancing the community’s existing water treatment and distribution capabilities through temporary wells and/or treatment facilities, or any effective combination of these measures.

If the contamination is not life threatening, the residents may simply have to boil their drinking water for a sufficient period of time to destroy contaminates before consuming the water. In those situations, the local health department will issue a boil water advisory through the local media and EGLE and MDHHS-Health will offer technical advice and assistance as required.

Emergency Public Information. In a WMD attack, timely and accurate public information will be critically important to ensure public cooperation with and support and implementation of protective actions, to reduce fear and panic, and to help facilitate a rapid and effective response and recovery effort. The nature and potential lethality of a WMD attack necessitates that consideration be given to disseminating and updating public information more frequently than it would be with other types of disasters and emergencies. Given accurate and timely information, the vast majority of the affected population will likely cooperate with the emergency provisions put forth by local, state, and federal officials. If that information is not available or is not timely, then the affected residents will take whatever steps they feel are prudent and necessary to protect themselves, their families, and their property. (Refer to the “Public Information in a WMD Attack” section above and the Information and Planning ESF for specifics on emergency public information activities.)

Recovery Concerns in a WMD Attack. Responsibilities of various state departments/agencies for basic recovery actions are identified in the ESFs and the MEMP Recovery Support Plan. In addition to those basic measures, there are several additional recovery measures that may have to be implemented in the event of a significant WMD attack:

Debris Removal and Management. If a WMD attack involves a nuclear device or large-scale explosives/incendiary devices, debris removal and management may be a significant issue. Because most local communities do not have sufficient resources and technical knowledge to carry out a debris removal and management operation of the magnitude that might be required in the aftermath of a significant WMD attack, state and federal assistance will most likely be required. In addition, if a nuclear device is employed, radiological surveying, monitoring, and decontamination will be required as part of the operation. Further, due to the intense irradiating effects of neutron-induced radiation in the vicinity of ground zero, certain geographical areas may remain highly radioactive and unusable for many years.

The MSP/EMHSD has experience in setting up and managing a large-scale debris management operation. Additionally, if a major disaster declaration is granted by the President under the federal Stafford Act, considerable federal agency and private sector debris removal and management expertise and resources can be brought to bear under the Public Assistance Grant Program (PAGP) and other authorities. If the decision is made for a state-managed debris operation, the MSP/EMHSD will work directly with FEMA and other responsible federal departments/agencies, with designated state departments/agencies (e.g., MDMVA, EGLE, MDOT, etc.), and with private contractors and local officials to do the following in accordance with the Michigan Disaster Debris Management Plan (MSP/EMHSD Publication 109):

- Determine debris clearance and removal priorities.
- Establish work schedules and communication protocols.
- Develop and implement contracts.
- Manage the flow of paperwork.
- Review and approve cost documentation.
- Supervise work activities.
- Ensure that all involved parties are completing the required work on time and in accordance with local, state, and federal regulations.

If necessary, the MSP/EMHSD may establish one or more on-scene “satellite” offices to allow for greater coordination and a more efficient and effective delivery of services. If radiological monitoring and decontamination are required as part of the debris removal and management operation, EGLE, MSP/EMHSD, MDMVA, and DTMB will arrange for and coordinate such assistance.

(Refer to the Public Works and Engineering ESF and MSP/EMHSD Publication 109–Michigan Disaster Debris Management Plan, for more information on debris removal and management operations under the federal PAGP. Refer to the Health and Environmental Protection ESF, Technological Disaster Procedures/Nuclear Power Plant Incidents, and WMD Attack Procedures/Nuclear Attack (Military) for more information on radiological monitoring and decontamination.)

Decontamination of Facilities. In the aftermath of a WMD attack involving a nuclear device or chemical, biological, or radiological agents, decontamination of facilities, sites, and systems will likely be required before they can be cleaned up, restored, repaired, or brought back into use. Depending on the agent involved, significant federal assistance may be required in setting up and implementing the decontamination operation. The DTMB is responsible for coordinating the decontamination of state facilities. Technical advice, guidance and assistance will be provided by the MDHHS-Health, EGLE, MDLARA, and MDMVA, as appropriate. (Refer to the Health and Environmental Protection ESF, Public Works and Engineering ESF, WMD Attack Procedures/Nuclear Attack (Military), and Technological Disaster Procedures/Nuclear Power Plant Incidents for more information on public facility decontamination.) Affected local communities are responsible for coordinating the decontamination of local facilities, both public and private. Decontamination of federal facilities located in the affected area is the responsibility of the federal government. Decontamination of agricultural facilities/infrastructure is the responsibility of the affected local community and/or involved agricultural enterprise, with technical assistance and regulatory oversight provided by the MDARD, as appropriate. Technical guidance and assistance in decontamination operations will be provided to affected local communities through the SEOC, and/or by federal and state officials at the scene.

Federal decontamination assistance may be provided directly by the department/agency itself, or through federally-arranged private contractors under a specific emergency authority. Refer to **TAB F** for a list of federal response support assets.

Mental Health Services. Depending on the nature of the WMD attack, widespread mental health services may be required in the aftermath of the attack. Such services will be provided through the existing Community Mental Health

Services Program (CMHSP) structure. If necessary, assistance will be sought from federal HHS, which may be able to provide funding for additional or extended crisis counseling services in the event of a Presidential major disaster declaration. It is important that mental health programs for the public be quickly established to assist in dealing with the psychological impacts of an incident.

Similarly, emergency response personnel may require Critical Incident Stress Management (CISM) assistance. The Michigan Crisis Response Association (MCRA) can assist in providing CISM intervention to responders impacted by traumatic events. There are approximately 56 teams in Michigan whose membership is comprised of individuals from law enforcement, fire and emergency medical services, hospital staff, educators, mental health professionals, and clergy. The MCRA can also provide assistance to communities in developing crisis response plans. (Refer to the Health and Environmental Protection ESF and "Health and Environmental Protection Concerns in a WMD Attack" in this section for more information.)

Critical WMD Attack Preparedness and Response Actions

Note: In the event of a National Terrorism Advisory System (NTAS) "Imminent Threat" alert indicating a credible, specific, and impending terrorist threat against the United States (or if an actual attack has occurred), ALL state departments/agencies are responsible for: 1) reviewing all protective measures recommended at the "Elevated Threat" alert level; and 2) taking, as appropriate, the preparedness and response actions listed below in this section.

ALL STATE DEPARTMENTS/AGENCIES:

Implement Continuity of Operations Plans (COOPs) at the direction of the Governor. Each department/agency has developed a COOP to ensure the continuation of Essential Functions in the pre-, trans-, and post-attack periods. These plans will be implemented by department/agency directors at the direction of the Governor or his/her designee. (See related task assignments below.)

Suspend nonessential operations. Each department/agency director will determine which operations should be suspended, curtailed, or consolidated preceding an attack to facilitate relocation of staff and resources. Essential Function operations will either continue at their normal location or be transferred to an AOF (locations identified in department/agency COOPs) to ensure their continuation, or resumption when conditions permit. Based on specific direction from the Governor and DTMB, the decision to relocate Essential Function operations will be made through the SEOC/ASEOC.

Facility closures. If incident circumstances are such that closure of DTMB owned / managed facilities is required, the DTMB Director is authorized to close the affected facilities and grant administrative leave to the affected state employees. The authority to temporarily close facilities and provide administrative leave to state employees due to building closure rests exclusively with the DTMB Director, after appropriate consultation with the Governor's Office, pursuant to 1984 PA 431, as amended (Management and Budget Act), and the DTMB Administrative Manual, "General or Isolated Emergencies".

(This authority, however, does not extend to state correctional facilities and state institutions, which fall under the administrative purview of their respective department directors. State offices in leased buildings may be ordered closed by the DTMB Director and the affected state employees may be granted administrative leave; however, the DTMB Director does not have the authority to close a privately-owned building if there are other non-state tenants in the building. If state employees are the only tenants in a privately-owned, leased building, then the DTMB may have the authority to close and secure the building.)

Ensure emergency assignments are staffed. The department/agency director will provide liaison to the SEOC/ASEOC for the purpose of coordinating response and recovery operations. The director will also ensure that adequate staffing for department/agency Essential Functions is maintained, in accordance with the department/agency COOP.

Inform staff of emergency procedures. The department/agency director will alert executive staff of the emergency procedures to be followed in an attack, including individual protective measures, reporting, requests for assistance, suspending or curtailing operations, relocation, pre- and post-attack staffing patterns and work locations, and the protection of vital records and resources. This information, contained in the department/agency COOP, will immediately be disseminated to all department/agency staff utilizing the most expedient communication channels available at the time, up to and including the use of the media.

Ensure vital resources are protected. The department/agency director will ensure that vital department/agency resources (i.e., records – hardcopy and electronic, materials/supplies, equipment, etc.) are relocated to a safe location away from the anticipated impact area of an attack, as required and in accordance with the department/agency COOP.

Generally, vital resources will be relocated to the department/agency AOF, or to another facility outside the anticipated impact area, if appropriate for the continuation or resumption of Essential Functions.

Michigan State Police, Emergency Management and Homeland Security Division (MSP/EMHSD); EXECUTIVE (GOVERNOR'S) OFFICE; MICHIGAN JUDICIARY; AND MICHIGAN LEGISLATURE:

As appropriate, implement the Michigan Continuity of Government Plan and coordinate continuity of government activities to facilitate recovery. If an attack is imminent or has occurred, and it has or is likely to negatively impact state government, it may be necessary to institute COG measures. As appropriate, the MSP/EMHSD will work with the Executive, Legislative, and Judicial Branches of state government to implement the MCOGP to provide for the continuation of Constitutional governance during the pre-, trans-, and post-attack periods. This may include the establishment and operation of an Alternate Seat of Government (ASG). Depending on the nature, scope, and magnitude of the attack, it is possible that COG operations will continue well into the post-attack recovery period. As appropriate, state department/agency COOPs and local government COG plans and COOPs will also be implemented to provide for statewide governmental continuity and stability. (Refer to the MCOGP – a Support Plan to the MEMP – for more detailed information on statewide COG operations.

Note: Continuity of government is the most essential governmental service because government's primary (and most critical) mission is the preservation of itself. Without a viable and functioning governmental organization, other essential governmental services that protect public health, safety and well-being, property and the environment cannot occur. Therefore, COG will always be the primary and most critical mission of state government. Without it, lives and property would be put in jeopardy, essential services would not be delivered as needed, and Constitutionally-mandated processes that provide governmental validity and viability would not occur.

MSP/EMHSD:

Prepare predictive models of damage, contamination, and casualty assessments following a WMD attack. The Information and Planning ESF in the SEOC/ASEOC will attempt to predict the spatial extent of agent/material dispersion and contamination, and the physical damage and casualties expected following a WMD attack. The MSP/EMHSD will coordinate this function. However, it does not have significant technical knowledge of predictive modeling or the nature and characteristics of the various WMD agents/materials that might be employed in an attack. Therefore, significant technical assistance will be required from departments/agencies with specific subject matter expertise such as the MDARD, EGLE, MDHHS-Health, MDMVA, and MDLARA. As appropriate, predictive modeling programs will be used for this process along with the GIS-based maps and census data available for all areas of the state. This predictive modeling, if successful, will allow for the rapid development and implementation of appropriate mitigation, response and recovery measures based on the anticipated attack-related damage and impacts.

MICHIGAN DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT (MDARD):

Determine the risk posed to key critical infrastructure and coordinate vulnerability reduction measures. At the NTAS "Imminent Threat" alert level, the MDARD will, as appropriate, coordinate with the owner/operators of major agricultural enterprises and infrastructure to recommend, provide technical guidance on, and/or implement measures to reduce the vulnerability of critical infrastructure that might be targeted or otherwise negatively impacted by a WMD attack.

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES-HEALTH (MDHHS):

As appropriate, implement the pre- and/or post-incident vaccination program. The MDHHS-Health has developed pre- and post-incident vaccination plans for the state, in collaboration with the MDHHS Communicable Disease and Immunization Program and the Regional Smallpox Planning Teams. Continued planning for the establishment of mass vaccination clinics will identify and assure personnel resources and professional expertise is available to assist in mass vaccination efforts aimed at stopping the spread of infectious diseases including, but not limited to, novel diseases such as Pandemic Influenza.

Manage the stockpiling and distribution of medical countermeasures. If a WMD attack triggers a serious or widespread outbreak of a communicable disease, the MDHHS-Health will coordinate the procurement and distribution of medications to local health departments and medical facilities to prevent the spread of the disease. The objective is to dispense counter measures, such as vaccines, antiviral agents, anti-toxins, or other therapeutics, to the affected population within 48 hours. The MDHHS-Health manages several plans and programs to accomplish this. The MDHHS-Health is also responsible for coordinating with the CDC for the acquisition and delivery of the SNS, if needed, as described in the "Health and Environmental Protection Concerns in a WMD Attack" section. Risk groups will be identified by the MDHHS-Health and local health departments, and medications will be distributed according to need and supply.

MICHIGAN DEPARTMENT OF EDUCATION (MDE):

Issue emergency advisories to school districts. The Superintendent of Public Instruction, in collaboration with the MDHHS-Health, will issue emergency advisories to intermediate school districts at appropriate times preceding an imminent attack or during the immediate post-attack period, regarding the protection of students, suspension of school activities, and the use of school resources to support population protection measures. Such advisories will be issued through the MDE EMC, who in turn will forward the information to intermediate school districts through the SEOC/ASEOC and JIC. Local school districts will be notified by the appropriate intermediate school district. These advisories are necessary to ensure that each local school district fully understands the situation and takes the necessary actions to protect students and support emergency operations. Directives regarding suspension of school and the release of students will be implemented locally per district procedure.

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGEL):

Determine the risk posed to key critical infrastructure and coordinate vulnerability reduction measures. At the NTAS "Imminent Threat" alert level, EGLE will, as appropriate, coordinate with those critical infrastructure owner/operators under their administrative or regulatory purview (e.g., water distribution and wastewater treatment systems, dams, chemical and other hazardous material facilities, etc.) to recommend, provide technical guidance on, and/or implement measures to reduce the vulnerability of critical infrastructure that might be targeted or otherwise negatively impacted by a WMD attack.

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (MDLARA):

Determine the risk posed to key critical infrastructure and coordinate vulnerability reduction measures. At the NTAS "Imminent Threat" alert level, the MDLARA/MPSC will, as appropriate, coordinate with utilities and energy suppliers (electric, petroleum, and natural gas) to recommend, provide technical guidance on, and/or implement measures to reduce the vulnerability of critical infrastructure that might be targeted or otherwise negatively impacted by a WMD attack.

MICHIGAN DEPARTMENT OF MILITARY AND VETERANS AFFAIRS (MDMVA):

Activate the WMD Civil Support Team. In the immediate aftermath of a WMD attack, the MSP/EMHSD will, as appropriate, work with the MDMVA to activate the 51st WMD CST stationed at Fort Custer in Augusta. The WMD CST is capable of providing technical advice, onsite situational assessments, and enhanced detection capability in support of first responders at the scene of the attack. Depending on the situation, other Department of Defense (DOD) assets may also be deployed to the state (normally upon state request) and assigned specific response missions by FEMA under the NRF. The MDMVA EMC will track, monitor, and report on the activities and status of the WMD CST and other DOD assets while activate/deployed within the state.

Provide information on troop convoy movements. If a portion of Michigan National Guard (MNG) troops are activated to federal service in anticipation of or in the immediate aftermath of a WMD attack, the MDMVA EMC will provide SEOC/ASEOC staff with regular status updates on troop and equipment convoy movements within the state to avoid a conflict with evacuation routes and transportation staging areas. This information will be released to the public through the EAS and JIC, in accordance with the MNG Public Information Program and in cooperation and coordination with the MSP/EMHSD.

MICHIGAN STATE POLICE (MSP):

Provide increased law enforcement support for special events. Special events held in Michigan that are highly visible nationally and/or internationally provide terrorists with targets of strategic importance. Examples include but are not limited to:

- Political conventions/rallies.
- Visits by dignitaries.
- Major sports, cultural, religious, or corporate events.
- Major meetings/conventions where issues of national/international interest are discussed.

The DHS and FBI will coordinate with the MSP and local law enforcement agencies to arrange suitable surveillance and security operations for these events, consistent with the attack threat. In addition to MSP Field Support, MSP district-level and MSP/MIOC support, the MSP/EMHSD will coordinate coverage from elements of the RRTN and other local and state support assets, as appropriate.

At the “Imminent Threat” alert level, the MSP will consult with the Governor’s Office, MSP/EMHSD, the FBI and DHS, and other involved entities to consider the potential cancellation, postponement, or alteration of events determined to be at risk based on actual conditions and/or intelligence and threat assessments.

Conduct threat assessments and coordinate information exchange. The MSP/MIOC and MSP Field Support routinely exchange information on potential terrorist threats with the DHS, FBI, and local law enforcement agencies as part of the MSP’s ongoing threat assessment efforts, and as a member of the FBI’s JTTF/Detroit Field Office. At the “Imminent Threat” alert level, these activities are expected to increase in anticipation of, or response to, an attack in or impacting Michigan.

Disseminate NTAS alerts. The MSP/MIOC and MSP Operations will initiate the appropriate NTAS notification protocol when an “Elevated Threat” or “Imminent Threat” alert is received from the DHS. Appropriate threat level information will be disseminated to allow consideration of protective measure implementation by governmental departments/agencies, private businesses and institutions, and the public. The MSP/EMHSD will also disseminate NTAS alerts to all state departments/agencies and local emergency management program jurisdictions. In addition, the MSP/EMHSD will coordinate with the DTMB to post the NTAS threat level information (direct or via link, as appropriate) on State of Michigan web and social media sites, and on department/agency intranet sites for state employees.

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET (DTMB):

Suspend nonessential operations and close vulnerable facilities. At the “Imminent Threat” alert level, the DTMB will coordinate with the Governor’s Office, each department/agency director, and the MSP/EMHSD to determine which operations (if any) should be temporarily suspended, curtailed, or consolidated, and which state facilities (if any) should be closed because they may be vulnerable to or negatively impacted by a WMD attack. This will be done in accordance with established department/agency COOPs.

Facility closures. If incident circumstances are such that closure of DTMB owned / managed facilities is required, the DTMB Director is authorized to close the affected facilities and grant administrative leave to the affected state employees. The authority to temporarily close facilities and provide administrative leave to state employees due to building closure rests exclusively with the DTMB Director, after appropriate consultation with the Governor’s Office, pursuant to 1984 PA 431, as amended (Management and Budget Act), and the DTMB Administrative Manual, “General or Isolated Emergencies”.

(This authority, however, does not extend to state correctional facilities and state institutions, which fall under the administrative purview of their respective department directors. State offices in leased buildings may be ordered closed by the DTMB Director and the affected state employees may be granted administrative leave; however, the DTMB Director does not have the authority to close a privately-owned building if there are other non-state tenants in the building. If state employees are the only tenants in a privately-owned, leased building, then the DTMB may have the authority to close and secure the building.)

Coordinate and evaluate protective measures for state facilities and institutions. At the “Imminent Threat” alert level, the DTMB will conduct an expedient review of the protective measures for state facilities and institutions to determine if they are adequate to meet potential (or actual) WMD attack conditions. The results of this review will be consulted when preparing a prioritized listing of those facilities (where Essential Functions are performed) that will require critical infrastructure protection measures, in accordance with current DTMB threat response procedures.

State Government Post-Attack Continuity Operations.

Alternate Operating Facilities. Each state department/agency must, in its COOP, identify essential personnel and resources and an AOF (or AOFs) necessary for the execution of its Essential Functions in the post-attack period. Because Lansing is a possible attack target due to its political importance, it may have to be evacuated (depending on the attack scenario). Therefore, each state department/agency must select an AOF (or AOFs) located outside of Lansing from which it will conduct Essential Functions. When attack is imminent or has occurred identified essential state personnel will, as directed by the Governor, evacuate the Lansing area with the general populace. As soon as conditions allow evacuees to leave shelters, the essential state personnel will report to their regular work location in Lansing, if the location is undamaged, or to the AOF(s) identified in their department/agency COOP to resume Essential Functions.

State department/agency Essential Functions will be conducted at designated AOFs until conditions in Lansing allow for the transfer of personnel and resources back to their normal Lansing area work locations, or to another designated location. If the Lansing area work locations are not usable, the departments/agencies will continue to conduct Essential

Functions at their designated AOF(s), in accordance with their COOPs, until such time as more permanent arrangements can be made for work facilities.

Alternate Seat of Government. When attack is imminent or has occurred, designated elements of the Executive, Legislative and Judicial Branches of Michigan State Government will, as directed by the Governor, relocate to an ASG at a location identified in the Michigan Continuity of Government Plan (MCOGP). (Multiple potential ASG sites have been identified in the MCOGP to provide a range of relocation options in response to incident conditions. The selected ASG will be located outside of the boundary of any potential direct effects risk area.) After the attack, when conditions allow, an assessment will be conducted of the Lansing area state governmental complexes to determine if they are too severely damaged or negatively impacted for use. (It is expected that all facilities will have to be decontaminated before re-use.) If the Lansing state governmental complexes are not severely damaged after the attack and they can be adequately decontaminated, the Executive, Legislative, and Judicial Branches will re-convene in Lansing to reconstitute Michigan State Government. If conditions do not allow for reconstitution in Lansing, the ASG will remain operational until such time as more permanent arrangements can be made for work facilities.

Note: The MCOGP and department/agency COOPs contain detailed information regarding Michigan State Government continuity operations. All of these documents have restricted access and therefore are only available to those authorized individuals that have a designated continuity role. State department/agency COOPs are electronically housed on a restricted access web site maintained and controlled by the DTMB. The DTMB oversees and administers the state department/agency COOP process. The MSP/EMHSD maintains the MCOGP, in partnership with the DTMB and the Executive, Legislative, and Judicial Branches, as a Support Plan to the MEMP.

Critical Post-Attack Recovery Actions

Note: During post-attack recovery, state departments/agencies are responsible for: 1) completing all actions prescribed in the preceding "Critical WMD Attack Preparedness and Response Actions" section, as appropriate; and 2) taking the following additional recovery actions, as appropriate.

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, ENERGY (EGLE):

Note: The following two task assignments are applicable only if a radiological agent is used as the WMD.

Coordinate state field team radiological assessment and control activities:

- Coordinate field team radiological monitoring and sampling.
- Using the information obtained through radiological monitoring and sampling and from other sources, assesses the nature and extent of the attack.
- Assess meteorological conditions using information (as available) from the National Weather Service, state meteorologists, online meteorological web sites, local EOCs, and other sources.
- Assist in assessing protective action recommendations.
- Coordinate the distribution of dosimetry to state emergency workers and maintain records of exposure.
- Control exposure to the extent possible.
- Based upon the attack assessment, assist in defining (by identifiable geographic boundaries) the area(s) actually or potentially affected by radioactive fallout and radiological contamination.

Note: Definition of geographic boundaries will be a joint cooperative effort between the MSP/EMHSD, EGLE, and other radiological subject matter experts in the SEOC/ASEOC Planning Section. Assessment information for making these determinations will likely come from a variety of sources.

Assist in screening the public for radiological contamination. If a WMD attack involving radiological materials forces an evacuation of the affected population, EGLE will coordinate with the MSP/EMHSD in locating, setting up, and overseeing portal monitor screening of shelter populations with potential radioactive contamination.

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (MDLARA):

Coordinate post-attack energy resource distribution. Control and coordination of the distribution and use of energy resources is a critical post-attack function. Electricity, natural gas, fuel oils, and gasoline must be readily available and equitably distributed to facilitate the relocation and sheltering of the population, but perhaps most importantly, they must be available to aid in post-attack recovery. The MPSC (EGLE) has a vital role in securing the cooperation of energy companies and the energy industry in the redistribution of energy resources as needed. Strict control over the distribution and use of energy resources may be necessary in the post-attack environment.

This effort will be carried out under the direction of the MPSC (EGLE) Governor's Office, in coordination with the MSP/EMHSD, based on recommendations made by the State's Energy Advisory Committee (EAC) in accordance with 1982 PA 191. A representative of the MAE/MPSC will be present in the SEOC to advise state officials on matters pertaining to energy resources and to coordinate the control and redistribution of energy resources as needed. (Refer to the Technological Disaster Procedures/Energy Emergencies section for more information.)

DEPARTMENT OF TECHNOLOGY, MANAGEMENT, AND BUDGET (DTMB):

Coordinate decontamination of state facilities. The DTMB is ultimately responsible for the management and use of state-owned and leased facilities. State facilities that are damaged or affected by a terrorist attack involving a WMD may require decontamination. Essential facilities will be identified in the SEOC and given priority in post-attack decontamination efforts. Such a determination will be based on assessment reports received and the operational needs of state government at the time.

Chemical and Biological Decontamination. Measures will vary greatly, depending on the agent used in the attack. However, decontamination must be done by professional cleaning contractors with experience in handling and dealing with chemical and biological agents. The decontamination measures can often take weeks to possibly even months to complete, rendering the affected facilities useless until the process is complete.

Radiological Decontamination. Includes any measures used to reduce radiation exposure. Radioactivity cannot be destroyed; however, radioactive contamination can be reduced by 1) removing radioactive particles from contaminated surfaces; 2) covering the contaminated surfaces with shielding materials (such as earth); or 3) isolating contaminated objects and waiting for the radiation levels to decrease through the process of radioactive decay.

MICHIGAN STATE POLICE (MSP) AND MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT):

Implement the Michigan Emergency Highway Traffic Regulation (EHTR) Plan. If a radiological agent is used as a WMD, the post-attack environment will likely pose significant challenges because a portion of the State's transportation network may be damaged or destroyed by direct weapons effects or otherwise made unusable due to debris, radioactive fallout, or other impediments. In addition, the post-attack recovery may require that military and emergency services organizations be given priority usage of the available transportation infrastructure. As required, the MSP and MDOT will jointly implement the EHTR Plan during the post-attack recovery period to regulate and control traffic on the state highway network (which includes all federal, state, county, and local highway systems and facilities) in order to adequately accommodate essential recovery activities and priority shipments of materials, equipment, and personnel.

TAB A: Chemical Agents – Physical Properties and Toxicities

Agent	Description	Molecular Weight	Boiling Point	Freezing Point	Specific Gravity	Vapor Pressure	LD50* (mg)	LCt50** (mg.min /m3)	Warning Properties
Tabun (GA)	Clear, colorless, and tasteless liquid.	162.3 daltons.	428-475 degrees F.	-58 degrees F.	1.073 g./ml (water = 1).	.037 mm Hg at 68 degrees F.	1000	400	Slight fruity odor.
Sarin (GB)	Clear, colorless, tasteless, and odorless.	140.1 daltons.	316 degrees F.	-68.8 degrees F.	1.089 g/ml.	2.1 mm Hg at 68 degrees F.	1700	100	None.
Soman (GD)	Clear, colorless, tasteless liquid. Discolors with aging to dark brown.	182.2 daltons.	332.6-392 degrees F.	-43.6 degrees F.	1.022 g/ml.	0.4 mm Hg at 77 degrees F.	100	50	Slight fruity or camphor odor.
VX	Amber colored, tasteless, and odorless oily liquid.	267.4 daltons.	568.4 degrees F.	-59.8 degrees F.	1.008 g/ml.	.0007 mm Hg at 77 degrees.	10	10	None.
Mustard (H) Distilled Mustard (HD)	Colorless when pure but usually pale yellow, dark brown or black oily liquid. Vapor colorless.	159.08 daltons.	419 degrees F	58.1 degrees F	1.27 g/ml (water = 1)				Faint garlic or mustard odor (odor threshold 0.6 mg/m3)
Phosgene Oxime (CG)	Colorless solid or yellowish-brown liquid.	113.93 daltons	128 degrees C.	No data.	No data.	11.2 mm Hg at 25 degrees C (solid), 13 mm Hg at 40 degrees C (liquid).			No data.
Lewisite (L)	Oily, colorless liquid.	207.32 daltons	374 degrees F.	.4 degrees F.	1.888 at 68 degrees F.	.394mm Hg at 68 degrees F.			Odor like geraniums.
Mustard Lewisite (HL)	Dark oily liquid.		Indefinite, but below 374 degrees F.	13 degrees F.	1.60 at 68 degrees F.	.248 at 68 degrees F.			Garlic-like odor.
Phosgene (CG)		98.9 daltons	47 degrees F.	-198 degrees F.	1.43 (liquid at 32 degrees F.)	1,215 mm Hg at 68 degrees.			Odor: slightly irritating in high concentrations.
Cyanogen Chloride (CK)			56.8 degrees F.			1230 mm Hg.			Very Irritating.
Hydrogen Cyanide (AC)			78.8 degrees F.			618.7 mm Hg.			Faint bitter almonds.

TABLE NOTES
Source: ATSDR and CDC web sites.
*LD50 is that dose that produces death in 50% of the exposed population.
**LCt50 refers to inhalation toxicity of the vapor form. "C" refers to the concentration of the vapor or aerosol in the air (measured as mg/m3) multiplied by the time the individual is exposed (measured in minutes). 50% of those exposed will receive a fatal concentration.

TAB B: Physiological Effects of Chemical Agents

Agent / NAERG Guide No.	Odor	Eyes	**Central Nervous System**	**Nose and Throat**	**Respiratory Tract**	**Skin**	**GI Tract**	**Cardio-vascular System**	**Treatment**
Tabun (GA) Sarin (GB) Soman (GD) GF (GF) VX / 153	None, or faint sweetish, fruity, or paint-like	Pupils – Miosis Eyes Conjunctivae – Redness Rest of Eye – Pain, especially in focusing, dimness of vision	Apprehension, giddiness, insomnia, headache, drowsiness, difficulty in concentrating, poor memory, confusion, slurred speech, ataxia, weakness, coma, convulsions	Increased salivation, Rhinotrosa	Tightness in Chest, Broncho-constriction, occasional wheezing, increased bronchial secretion, cough, dyspnea, substantial tightness	Sweating, pallor then cyanosis	Salivation, anorexia, nausea, vomiting, abdominal cramps, heartburn, diarrhea, involuntary deification	Occasional early transient tachycardia and/or hypotension followed by brachycardia and hypotension	Pretreatment with pyridostigmine. Post exposure therapy: Cholnargic blockage – atropine. Enzyme reactivation – oximes. Anticonvulsant – diazepam. Assisted ventilation. Suction for respiratory secretions
Mustard (H) (HD) Nitrogen Mustard (HN) / 153	Garlic or Horseradish. Irritating. None or fishy, irritating.	Pupil – Mydriasis. Conjunctivae – Redness, oedema, irritation, gritty pain. Rest of eye – Oedema of lids, pain, biapharospasm, photophobia, lachrymation, corneal ulceration, & possibly scarring.	Anxiety, depression	Swelling, irritation, ulceration, discharges, occasional oedema of larynx.	Slowly developing irritation, hoarseness, aphonia, cough, tightness, dyspnosis, rales. Pneumonia, fever, pulmonary oedema, in severe cases. Risk of secondary infection.		Pain, nausea, vomiting, diarrhea.	Shock after severe exposure.	Eyes: antibiotics, cyclopegics, and systemic analgesia. Skin: local dressings and antibiotics for infection. Antibiotics for respiratory infection. IV fluids.
Lewisite (L) and other arsenical vesicants / 153	Fruity to geranium-like. Irritating.	Conjunctivae – Prompt redness, oedema, irritation. Rest of eye – Immediate burning sensation, iritis, corneal injury	Anxiety, depression	Prompt irritation	Rapid irritation, hoarseness, a phonia, cough, pneumonia, fever, pulmonary oedema, pleural effusion in severe cases	Prompt burning. Red: 30 minutes. Blisters: first/ second day. Pain worse and necrosis deeper than H.	Diarrhea, nausea, vomiting, hepatic failure.	Shock after severe exposure. Hemolytic anemia, haemo-concentration.	Like Sulphur and nitrogen mustards. BAL in oil IM for systematic chelation. BAL ointment for eyes and skin.
Mustard Lewisite Mixture (HL) / 153	Garlic-like	Like HD, HN, and L.	Anxiety, depression						Like Sulphur mustard, nitrogen mustard and lewisite.
Phosgene Oxime (CX) / 153	Unpleasant and irritating.	Conjunctivae - Violently irritating, redness, oedema. Rest of eye – Corneal injury with blindness, lachrymation.	Anxiety and depression.	Very irritating to mucous membranes.	Rapid irritation and coughing. Later pulmonary oedema.	Immediate severe irritation and intense pain. Within 1 minute the affected area turns white, surrounded by erythema. Swollen within 1 hour, blistered after 24 hours. Necrosis may occur. Long recovery (1-3 months).			Apply dressings of sodium bicarbonate. System analgesics. Treat as any other necrotic skin lesion.
Phosgene (CG) / 125	Green corn, grass, or new mown hay.	Conjunctivae – Irritation. Rest of eye – Lachrymation (after respiratory symptoms).	Anxiety and depression.	Irritation.	Coughing, choking, chest tightness on exposure. Latent period, then pulmonary oedema, dyspnosa, frothy sputum, rales, pneumonia, and fever.	Possible cyanosis following pulmonary oedema.	Nausea, occasional vomiting after respiratory symptoms.	Shock after severe exposure, hypotension, and tachycardia.	Corticosteroids IV and by inhalation promptly may be life-saving. Rest, oxygen, antibiotics.
Hydrogen Cyanide (AC) / 117	Faint bitter almonds.		May have initial excitation; then depression, giddiness, headache, irrational behavior, ataxia, convulsions, or coma.		Deep respiration followed rapidly by dyspnosa, gasping then cessation of respiration.	Initially pinker than usual; may change to cyanosis.	Nausea.	Profound hypotension.	
Cyanogen Chloride (CK) / 125	Very irritating.	Conjunctivae – Irritation. Rest of eye – Lachrymation.		Irritation.	Irritation, cough, choking, dyspnoea; pulmonary oedema can be rapid.		Like hydrogen cyanide.		Like hydrogen cyanide and phosgene.

Source: FM 8-9: NATO Handbook on the Medical Aspects of NBC Defensive Operations AmedP-6(B)

TAB C: Medical Characteristics of Biological Agents

Disease	Transmit Man to Man	Infective Dose (Aerosol)	Incubation Period	Duration of Illness	Lethality (approx. case fatality rates)	Persistence of Organism	Vaccine Efficacy (aerosol exposure)
Inhalation anthrax	No	8,000-50,000 spores	1-6 days	3-5 days (usually fatal if untreated)	High	Very stable - spores remain viable for > 40 years in soil	2 dose efficacy against up to 1,000 LD_{50} in monkeys
Brucellosis	No	10 -100 organisms	5-60 days (usually 1-2 months)	Weeks to months	<5% untreated	Very stable	No vaccine
Cholera	Rare	10-500 organisms	4 hours - 5 days (usually 2-3 days)	≥ 1 week	Low with treatment, high without	Unstable in aerosols & fresh water; stable in salt water	No data on aerosol
Glanders	Low	Assumed low	10-14 days via aerosol	Death in 7-10 days in septicemic form	> 50%	Very stable	No vaccine
Pneumonic Plague	High	100-500 organisms	2-3 days	1-6 days (usually fatal)	High unless treated within 12-24 hours	For up to 1 year in soil; 270 days in live tissue	3 doses not protective against 118 LD_{50} in monkeys
Tularemia	No	10-50 organisms	2-10 days (average 3-5)	≥ 2 weeks	Moderate if untreated	For months in moist soil or other media	80% protection against 1-10 LD_{50}
Q Fever	Rare	1-10 organisms	10-40 days	2-14 days	Very low	For months on wood and sand	94% protection against 3,500 LD_{50} in guinea pigs
Smallpox	High	Assumed low (10-100 organisms)	7-17 days (average 12)	4 weeks	High to moderate	Very stable	Vaccine protects against large doses in primates
Venezuelan Equine Encephalitis	Low	10-100 organisms	2-6 days	Days to weeks	Low	Relatively unstable	TC 83 protects against 30-500 LD_{50} in hamsters
Viral Hemorrhagic Fevers	Moderate	1-10 organisms	4-21 days	Death between 7-16 days	High for Zaire strain, moderate with Sudan	Relatively unstable - depends on agent	No vaccine
Botulism	No	0.001 µg/kg is LD_{50} for type A	1-5 days	Death in 24-72 hours; lasts months if not lethal	High without respiratory support	For weeks in nonmoving water and food	3 dose efficacy 100% against 25-250 LD_{50} in primates
Staph Enterotoxin B	No	0.03 µg/person incapacitation	3-12 hours after inhalation	Hours	< 1%	Resistant to freezing	No vaccine
Ricin	No	3-5 µg/kg is LD_{50} in mice	18-24 hours	Days - death within 10-12 days for ingestion	High	Stable	No vaccine
T-2 Mycotoxins	No	Moderate	2-4 hours	Days to months	Moderate	For years at room temperature	No vaccine

Source: Medical Management of Biological Casualties Handbook, USAMRIID, February 2001

TAB D: Radiation Dispersion Devices (RDD)

Radiological Materials	Type / Amount of Exposure	Effect	Treatment
Alpha Particles	Internal Hazard Only	Long-term Psychological Effect	None
Beta Particles	External & Internal Hazard	"Beta Burns" on Skin Long-term Physiological Effect Psychological Effect	Treat burns as normal
Examples of radioactive materials (Gamma Emitters) that could be used in a RDD include: Americium 241 (used in exploratory oil drilling and density gauges) Cesium 137 (industrial radiography gauges, food irradiators) Cobalt 60 (medical therapy, industrial irradiators, radiography) Strontium 90 (industrial heating devices)	50mGy (5 Rads)	Usually no detectable injury or initial symptoms	Radiation burns can be treated as any other burn injury. Therapies include the use of cytokines currently used to treat leukemia, lymphoma, aplastic anemia, and AIDS. Drugs such as calcium or zinc DPTA (diethylenetriamine pentaacetic acid) and Prussion Blue have now been approved as new drugs by the U.S. Food and Drug Administration.) Resources: www.fda.gov www.orau.gov/reacts/
	1 Gy (100 Rads)	May cause nausea and vomiting for 1-2 days and temporary drop in production of new blood cells	
	3.5 Gy (350 Rads)	Nausea and vomiting initially, followed by a period of apparent wellness. At 3-4 weeks, there is a potential for deficiency of white blood cells and platelets. Medical care is required.	
	Higher levels of exposure can be fatal. Medical care is required.	At 3-5 weeks medical care for 10 – 50 percent of those exposed. At high end of range (i.e., ~300-350 Gy), death may occur to 100 percent. Survivors experience immunosuppression and bleeding and should be treated for infection and given platelet transfusions.	

Sources: Centers for Disease Control and Prevention; EGLE

TAB E: Nuclear Weapons Effects (Planning Factors)

1 MT and 10 MT Air Burst

Weapon Effect	Radii of Effect (1 MT) Nuclear Device	Radii of Effect (10 MT) Nuclear Device
Thermal Radiation Radius (3rd degree burns)	11.7 kilometers	30 kilometers
Air Blast Radius (widespread destruction)	7.2 kilometers	15.4 kilometers
Air Blast Radius (near total fatalities)	2.7 kilometers	5.9 kilometers
Ionizing Radiation Radius (5 Sieverts / 500 REM)	3.1 kilometers	4.8 kilometers
Fireball Duration	4.5 seconds	12.7 seconds
Fireball Radius	530 meters	1.1 kilometers

Source: Handbook on the Medical Aspects of NBC Defensive Operations FM 8-9, February 1, 1996, and miscellaneous sources

1 KT and 10 KT Surface Burst

Weapon Effect	Radii of Effect (1 KT) Nuclear Device	Radii of Effect (10 KT) Nuclear Device
Thermal Radiation Radius (3rd degree burns)	700 meters	2.1 kilometers
Air Blast Radius (widespread destruction)	400 meters	1 kilometer
Air Blast Radius (near total fatalities)	300 meters	600 meters
Ionizing Radiation Radius (6 Sieverts / 600 REM)	800 meters	1.2 kilometers
Fireball Duration	.2 seconds	.6 seconds
Fireball Radius	150 meters	360 meters

Sources:

Davis L., LaTourrette T., Mosher, D., Davis, L., & Howell, D. (2003) Individual Preparedness and Response to Chemical, Radiological, Nuclear, and Biological Terrorist Attacks. Santa Monica, CA: RAND

Glasstone, S. & Dolan, P.J. (1977) Effects of Nuclear Weapons – Third Edition. Washington, DC: United States Government Printing Office

North Atlantic Treaty Organization Military Agency for Standardization (1994) NATO Handbook on the Medical Aspects of NBC Defensive Operations. Brussels, Belgium: North Atlantic Treaty Organization

United States Congress. Office of Technology Assessment. (1979) The Effects of Nuclear War. Washington, DC: United State Government Printing Office

United States Department of Homeland Security. (2008) Planning Guidance for Protection and Recovery Following Radiological Dispersal Device (RDD) and Improvised Nuclear Device (IND) Incidents. Federal Register, Vol. 73, No. 149

United States Homeland Security Council Interagency Policy Coordination Subcommittee for Preparedness and Reponses to Radiological and Nuclear Threats (2009) Planning Guidance for Response to a Nuclear Detonation. Washington, DC: United State Government Printing Office

Notes: A 1 kiloton (KT) nuclear device equals 1,000 tons of TNT energy. A 10 KT nuclear device equals 10,000 tons of TNT energy. A 1 megaton (MT) nuclear device equals 1,000,000 tons of TNT energy. A 10 MT nuclear device equals 10,000,000 tons of TNT energy. An air burst is an explosion in which a weapon is detonated in the air at an altitude below 30 kilometers but at sufficient height that the fireball does not contact the surface of the earth. A surface burst is an explosion in which a weapon is detonated on or slightly above the surface of the earth so that the fireball actually touches the land or water surface. Sievert is the System International unit for dose equivalent. The REM is the same, but is an older conventional unit still used at an operational level in the United States. 1 Sievert = 100 REM.

TAB F: National Terrorism Advisory System

Background: The NTAS serves as the primary system for communicating terrorist threat advisories to government agencies, private institutions, and the public. It is designed to provide the impetus and framework for taking threat-driven protective measures and vulnerability reduction programs. (The NTAS replaces the former color-coded Homeland Security Advisory System, or HSAS, introduced in March 2002.) Under the NTAS, the Secretary of Homeland Security and DHS will issue detailed alerts when the federal government determines that a credible terrorist threat exists. The NTAS alerts will provide a summary of the potential threat including geographic region, mode of transportation, critical infrastructure or private sector element(s) potentially affected by the threat, action being taken to ensure public safety, and recommended steps that individuals, communities, businesses, and governments can take to help prevent, mitigate, or respond to the threat. NTAS alerts will include a clear statement on the nature of the threat, which will be defined in one of two ways:

"Elevated Threat". This alert level warns of a credible threat against the United States.

"Imminent Threat". This alert level warns of a credible, specific, and impending terrorist threat against the United States.

Depending on the nature of the threat, alerts may be sent to law enforcement, distributed to affected areas of the private sector (including critical infrastructure), or issued more broadly to the public through both official and social media channels. The NTAS threat alerts will be issued for a specific time period and will automatically expire. Alerts may be extended if new information becomes available or as a specific threat evolves.

The State of Michigan has adopted the NTAS for emergency planning, preparedness, response, and recovery purposes. State response actions are keyed to the two alert levels, as indicated in the table below and on the following pages. When the federal government announces that a specific alert level is in effect, the MSP/EMHSD will begin to implement the corresponding set of state actions. If a terrorist attack occurs in Michigan or elsewhere in the U.S. (whether or not a WMD is involved), the "Imminent Threat" level will be put into effect. Corresponding state actions will be implemented at the discretion of the Governor's Office, the SDEMHS (MSP Director), and the MSP/EMHSD.

Alert Level	Initiating Condition	State Actions	Primary Agency
"ELEVATED THREAT"	This alert level warns of a credible threat against the United States.	Develop and review staff augmentation procedures. Develop, review, and update emergency plans and procedures. Train personnel in emergency responsibilities. Develop and review crisis training procedures. Develop and review procedures for relocating essential government staff to alternate locations to continue vital government functions. Develop and review procedures for suspending nonessential governmental functions and redirecting personnel to essential functions. Formulate and review appropriate protective/mitigation measures at critical facilities in the state. Conduct risk/vulnerability assessments of critical facilities in the state. Exercise emergency plans and procedures. Take other appropriate precautionary actions to enhance preparedness against a terrorist attack. Continue to monitor national and international conditions. Ensure attack warning systems are operational. Review accelerated (crisis) training programs for emergency functions. Prepare for increased public information activity. Review procedures on the preservation of vital records. Inform key executive, legislative, and judicial staff of continuity of government arrangements so they can review procedures, etc. Check communications links with designated emergency response or command locations. Provide the public with necessary information on national and international conditions. Consider partially activating the SEOC for situation monitoring, assessment, and recordkeeping. Be prepared to provide accurate, ongoing information to the media about federal, state, and local measures being taken to prevent/mitigate a terrorist attack involving WMD. Consider increasing surveillance of critical facilities/locations. Coordinate emergency plans with appropriate federal departments/agencies (including but not limited to the DHS, FEMA, the FBI, the USDA, and HHS), local and tribal governments, NGOs, and private sector partners. Assess the need to refine protective, mitigative, and preventive measures within the context of the current threat information. Review activation/mobilization procedures with the RRTN, MUSAR, and other state / local WMD response assets. Consider activating the Michigan Homeland Security Advisory Council to review the current threat and its potential impacts to the state and local communities. Review potential resource needs for various WMD attack scenarios. Review supplemental resource procurement procedures under the MEMAC and EMAC.	All agencies All agencies All agencies All agencies MSP/EMHSD; all agencies MSP/EMHSD; all agencies MSP/EMHSD; DTMB MSP/EMHSD; DTMB; MDOC; MDHHS-Health; MDMVA All agencies All agencies MSP/EMHSD MSP/EMHSD; MSP Operations All agencies MSP/EMHSD; Governor's Office All agencies MSP/EMHSD; Governor's Office; DTMB MSP/EMHSD MSP/EMHSD; Governor's Office MSP/EMHSD MSP/EMHSD; Governor's Office; all agencies All agencies MSP/EMHSD; all agencies MSP/EMHSD; all agencies MSP/EMHSD MSP/EMHSD; Governor's Office MSP/EMHSD; all agencies MSP/EMHSD

Alert Level	Initiating Condition	State Actions	Primary Agency
"IMMINENT THREAT"	This alert level warns of a credible, specific, and impending terrorist threat against the United States. (However, an attack has not yet occurred.)	At this alert level, state departments/agencies should review and implement protective measures recommended at the "Elevated Threat" alert level, if appropriate, and consider the following additional measures: Fully or partially activate the SEOC and recommend activation of local EOCs in areas potentially impacted by a WMD attack. Assess current conditions and consider relocation to the ASEOC. Install telephones, computers, etc., as required. Consider issuing a Governor's declaration of disaster, emergency, or heightened state of alert under 1976 PA 390, as amended, and taking appropriate response actions under same. Consider activation of attack warning systems if conditions warrant. Consider potential population protection measures, based on current and anticipated conditions. Consider activating and assigning shelter monitors for shelters housing key state staff. Provide additional security at critical governmental facilities/locations. Consider curtailing non-essential state functions and limiting access at state facilities to essential personnel only. Consider implementation of protective measures at state correctional facilities, in-patient mental health facilities, and other state-operated institutions. Provide recommendations to local governments and the private sector regarding appropriate measures to take to protect life and property, maintain essential operations, and recover from a potential attack involving WMD. Establish and maintain 24-hour communications, as appropriate, with federal response agencies, affected local governments, adjacent states and the Province of Ontario, Canada. Collect, compile, synthesize, and analyze assessment information provided by federal, state, local, and tribal responders, and the private sector, to determine the nature, scope, and magnitude of the situation and its potential impacts. Take additional precautions at public events or recommend that they be cancelled altogether if conditions warrant. Prepare departments/agencies to work at alternate sites or with a dispersed workforce, in accordance with established department/agency COOPs.	MSP/EMHSD MSP/EMHSD; DTMB MSP/EMHSD; Governor's Office MSP/EMHSD; MSP Operations MSP/EMHSD; Governor's Office MSP/EMHSD; MDHHS-Human Services DTMB; MSP; MDMVA DTMB; all agencies MDOC; MDHHS-Health; MDE; MDHHS-Human Services; MDMVA MSP/EMHSD; all agencies MSP/EMHSD; DTMB MSP/EMHSD; other agencies as required MSP/EMHSD; Governor's Office; all agencies DTMB; all agencies
"IMMINENT THREAT" "IMMINENT THREAT"	**An actual attack has occurred in Michigan, or in other parts of the United States and affecting Michigan.** **An actual attack has occurred in Michigan, or in other parts of the United States and affecting Michigan.**	At this level, state departments/agencies should review and implement protective measures recommended at previous alert levels, if appropriate, and consider the following additional measures: Fully activate the SEOC and begin relocation procedures to the ASEOC, if conditions warrant. Assign personnel to the SEOC/ASEOC, if not already done. Issue a Governor's declaration of disaster, emergency, or heightened state of alert under 1976 PA 390, as amended, and activate and mobilize necessary state emergency response and/or recovery elements. Activate attack warning systems if conditions warrant. Provide liaison to the FBI JOC, if activated. Close non-essential governmental/public facilities, as appropriate; Take additional security measures at those critical governmental/public facilities that must remain open. Establish and maintain 24-hour communications with federal response departments/agencies, affected local	MSP/EMHSD; DTMB MSP/EMHSD; all agencies MSP/EMHSD; Governor's Office MSP/EMHSD; MSP Operations MSP/EMHSD DTMB; Governor's Office DTMB; MSP; MDMVA

Alert Level	Initiating Condition	State Actions	Primary Agency
		and tribal governments, adjacent states and the Province of Ontario, Canada.	MSP/EMHSD
		If conditions warrant, activate the RRTN, MUSAR, MRIAT, MDARD/PERT, MDCH/MERIT, EGLE, or other appropriate state and local response assets.	MSP/EMHSD
		If conditions warrant, activate the 51st WMD/CST, MMRS, NDMS/DMATs, and other appropriate federal response and recovery assets.	MSP/EMHSD; MDHHS-Health; MDMVA; EGLE; other agencies as appropriate
		Prepare damage/casualty estimates.	MSP/EMHSD; other agencies as required
		If a nuclear detonation has occurred, review/interpret fallout history curves and predictions. If a chemical, biological, or radiological WMD is used in the attack, plot and analyze the actual/potential material dispersion to determine the impact area and attack scope/magnitude.	MSP/EMHSD; MDARD; MDHHS-Health; EGLE; MDLARA; MDMVA
		Advise on and coordinate state decontamination activities.	
		Reconstitute government through the provision of an Alternate Seat of Government; Alternate Work Facilities for Essential Functions; emergency orders, directives, rules, and regulations; emergency succession of key officials, when necessary; and the protection of vital records and resources.	DTMB; EGLE MSP/EMHSD; Governor's Office; Michigan Legislature; Michigan Judiciary; DTMB
		Determine and prioritize resource needs and coordinate the redistribution of resources.	
		If conditions warrant, implement control and rationing of essential goods and supplies.	MSP/EMHSD
		As necessary, request assistance from adjacent communities (through the MEMAC), states (through the EMAC), or the federal government (through FEMA or other agencies under the NRF).	MSP/EMHSD; Governor's Office MSP/EMHSD
		Request activation of the Strategic National Stockpile (SNS), as appropriate.	
		Consider activating the Michigan Disaster Donations Management Plan if unsolicited donations are, or might become, an issue.	MDHHS-Health; MSP/EMHSD
		Issue public information on a regular basis through a JIC.	MDHHS-Human Services; MSP/EMHSD
		As appropriate, provide information on troop convoy movements.	
		Inspect and sample food/feed supplies to prevent contamination from the WMD.	MSP/EMHSD; Governor's Office; all agencies
		Issue agricultural advisories and protective action guides to prevent contamination from the WMD.	MDMVA
		Coordinate post-attack food redistribution efforts.	MDARD
		Monitor post-attack service delivery to ensure equal access to disaster-related services.	MDARD
		Coordinate post-attack energy resource distribution.	MDARD
		Coordinate post-attack petroleum and natural gas pipeline safety/vulnerability reduction activities.	MDCR MDLARA
		Coordinate the identification, investigation, and control of communicable disease.	MDLARA
		Coordinate victim identification and mass fatality management services.	MDHHS-Health
		Provide post-attack monitoring, sampling and analysis of drinking water supplies, and coordinate water systems vulnerability reduction activities.	MDHHS-Health; MSP EGLE
		Implement the Michigan Emergency Highway Traffic Regulation Plan to monitor, redirect or constrain transportation systems, as appropriate.	MSP; MDOT
		Assist with crime scene management and the criminal investigation of the WMD attack.	MSP

TAB G: Federal Response Support Assets

The following represents a listing of various federal agencies and teams that may become involved (directly or indirectly) in a response to a terrorist threat or WMD attack in Michigan:

Department of Homeland Security (DHS). The DHS, created by the Homeland Security Act of 2002, brings together 22 federal agencies that have various missions related to homeland security. The DHS is the focal point for all federal homeland security actions and assets, including many of those listed below that could potentially be involved in helping to prevent, responding to, or supporting the response to a terrorist threat or WMD attack:

Office of Intelligence and Analysis. This office is responsible for using information and intelligence from multiple sources to identify and assess current and future threats to the United States.

Office of Operations Coordination and Planning. This office is responsible for monitoring the security of the United States on a daily basis and coordinating activities within the DHS and with governors, homeland security advisors, law enforcement partners, and critical infrastructure operators in all 50 states and more than 50 major urban areas nationwide.

Domestic Nuclear Detection Office. This office works to enhance the nuclear detection efforts of federal, state, tribal, and local governments, and the private sector, and to ensure a coordinated response to such threats.

Transportation Security Administration (TSA). The TSA protects the nation's transportation systems (i.e., aviation, rail, transit, highway, and pipeline sectors) while ensuring the freedom of movement for people and commerce. The TSA screens passengers and cargo at more than 450 airports, Deploy Federal Air Marshals on domestic and international flights, and has trained and deployed approximately 800 explosives detection canine teams to airports and mass transit systems nationwide. In addition, the TSA conducts daily background checks on over 15 million transportation-related employees working in or seeking access to the nation's transportation system.

U.S. Customs and Border Protection (CBP). Customs and Border Protection is one of the DHS's largest and most complex components, with a priority mission of keeping terrorists and their weapons out of the United States. It also is responsible for securing and facilitating trade and travel while enforcing hundreds of U.S. regulations, including immigration and drug laws. CBP guards nearly 7,000 miles of land border the U.S. shares with Canada and Mexico, and 95,000 miles of maritime border in partnership with the U.S. Coast Guard. CBP officers protect U.S. borders at official ports of entry, while Border Patrol agents prevent illegal entry into the U.S. of people and contraband between the ports of entry. The CBP Office of Air and Marine manages the largest law enforcement air force in the world, using it to patrol the nation's land and sea borders to stop terrorists and drug smugglers before they enter the U.S. CBP agricultural specialists prevent the entry of harmful plant pests and exotic foreign animal diseases, and work to prevent emerging threats in agro-terrorism and bio-terrorism.

U.S. Citizenship and Immigration Services (CIS). Citizen and Immigration Services grants immigration and citizenship benefits and works to ensure the integrity of the nation's immigration system.

U.S. Immigration and Customs Enforcement (ICE). Immigration and Customs Enforcement promotes homeland security and public safety through the criminal and civil enforcement of federal laws governing border patrol, customs, trade, and immigration. *U.S. Immigration and Customs Enforcement (ICE)* is the principal investigative arm of the DHS and the second largest investigative agency in the federal government.

U.S. Coast Guard (USCG). The USCG–one of the five U.S. armed forces and the only military organization within the DHS–is responsible for protecting the public, the environment, and U.S. economic interests in the nation's ports and waterways, along the coast, on international waters, or in any maritime region as required for national security.

U.S. Secret Service (USSS). The USSS is responsible for the protection of the President and other national leaders, visiting heads of state and government, designated sites, and National Special Security Events. The USSS also safeguards the nation's financial infrastructure and payment systems to preserve the integrity of the U.S. economy. The USSS is organized into two major components–one focused on protection and the other focused on investigation.

Federal Emergency Management Agency (FEMA). Federal Emergency Management Agency (FEMA) supports the nation's residents and first responders to ensure that, as a nation, we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards. (Refer below to the separate and more detailed section on FEMA for information on additional response support assets.)

In addition to the above agencies organic to the DHS, the following element under the DHS is instrumental in preparing for, responding to, and recovering from terrorist attacks:

Interagency Incident Management Group (IIMG). The IIMG is a federal headquarters-level, multi-agency coordination entity that facilitates strategic federal domestic incident management. The Secretary of Homeland Security activates the IIMG based on the nature, severity, magnitude, and complexity of the threat or incident. The IIMG is comprised of senior representatives from DHS components, other federal departments/agencies, and NGOs, as required. The IIMG membership is flexible and can be tailored or task-organized to provide the appropriate subject matter expertise required for the specific threat or incident at hand.

Federal Bureau of Investigation (FBI).

Domestic Emergency Support Team (DEST). A specialized interagency team composed of subject matter experts from the FBI, DHS/FEMA, DOD, DOE, HHS, and EPA. It provides guidance to the FBI SAC concerning WMD threats and actual incidents. Based upon a credible threat assessment, the U.S. Attorney General, in consultation with the Secretary of Homeland Security, may request authorization through the White House to deploy the DEST.

Strategic Legal Team. This team–composed of legal counsel from the FBI, U.S. Attorney's Office, and the District or State's Attorney's Office–provides legal guidance to the JOC Command Group concerning the strategies under consideration for resolution of the crisis.

Hazardous Materials Response Unit (HMRU). The HMRU has specialized sampling, detection, and identification capabilities of nuclear, biological, and chemical (NBC) agents. The HMRU is also equipped with a variety of personal protective (OSHA Levels A-C) and rescue equipment.

Evidence Response Teams (ERTs). The ERT's main functions are crime scene documentation and evidence collection in support of criminal investigations. Some ERTs are hazardous material response trained.

Critical Incident Response Group (CIRG). The CIRG facilitates the FBI's rapid response to, and the management of, crisis incidents. The CIRG integrates tactical and investigative resources and expertise for critical incidents which necessitate an immediate response from law enforcement authorities. The CIRG will deploy investigative specialists to respond to terrorist activities, hostage takings, child abductions and other high-risk, repetitive violent crimes, prison riots, bombings, air and train crashes, and natural disasters. Each of the three major areas of the CIRG–the Operations Support Branch, Tactical Support Branch, and National Center for the Analysis of Violent Crime–furnishes distinctive operational assistance and training to FBI field offices as well as state, local and international law enforcement agencies. CIRG personnel are on-call around the clock, seven days a week, to respond to crisis incidents.

Intelligence Unit. The FBI has experts that contribute to and coordinate detailed interagency activities related to a threat, critical incident, or special event. The unit provides intelligence via reports to all JOC units.

Federal Emergency Management Agency (FEMA or DHS/FEMA).

Urban Search and Rescue (US&R) Task Forces. The FEMA has developed, equipped, and trained a cadre of 28 National Urban Search and Rescue (US&R) task forces, strategically located in 19 states around the country, to provide assistance in incidents involving structural collapse. Any of the 28 task forces can deploy to a major disaster area to provide supplemental assistance in structural rescue. The US&R task forces can help locate, extricate, and provide onsite medical treatment to survivors trapped in collapsed structures. These task forces are staffed primarily by local fire department and emergency services personnel who are experienced and trained in collapsed structure search and rescue operations. Many of the teams now carry the added responsibility of responding to hazardous material/WMD incidents, swift water rescue calls, and specialized technical rescue emergencies. Although Michigan does not have a certified task force within its borders, task forces are located in nearby Miami Valley, Ohio, and Marion County, Indiana.

Note: Michigan, like many states, has recognized the need to support an intrastate team – Michigan Urban Search and Rescue (MUSAR) – which is a vital component of the State's intrastate US&R response capability.

Urban Search and Rescue (US&R) Incident Support Teams. The National Urban Search and Rescue Incident Support Team (IST) provides a group of highly qualified specialists readily available for rapid assembly and deployment to a disaster area. The IST furnishes federal, state, and local officials with technical assistance in acquiring and using US&R resources. It provides advice, incident command assistance, management, and coordination of US&R task forces, and US&R logistics support.

Federal Incident Management Assistance Teams (IMATs). Incident Management Assistance Teams are interagency, regionally-based, rapidly-deployable emergency response teams that provide a forward federal presence to improve response to serious incidents. The IMATs feature full-time, dedicated staff, and are able to deploy within two hours and arrive at an incident within 12 hours to support state and local Incident Command. Upon arrival, the IMATs will support the establishment of a Unified Command structure and aid federal, state, local, and tribal decision-makers in determining the nature, level, and type of immediate federal assistance that may be required.

The ultimate mission of the IMAT is to provide leadership in the identification and provision of supplemental federal assistance, and to coordinate with the State and affected local and tribal governments to facilitate timely and effective inter-jurisdictional response to an incident. The regional-level IMAT can be augmented as required with additional staff from other regional IMATs, from a national-level IMAT, or from other federal departments and agencies. The IMATs are supported by FEMA's Mobile Emergency Response Support (MERS) elements, which provide mobile telecommunications capabilities and life, logistics, operational, and power-generation support required for onsite management of response activities.

Background Notes: Incident Management Assistance Teams (IMATs) are an expanded version of the former Emergency Response Teams (ERTs) at the national and regional levels. Federal Emergency Management Agency's (FEMA's) plan is to have three national IMATs and 13 regional IMATs (one in each federal region, and two in Regions II, IV and VI). IMATs are led by experienced, senior-level emergency managers and staffed with permanent, full-time employees. This differs considerably from the former ERTs, which were staffed on an as-needed (collateral duty) basis.

Department of Health and Human Services (HHS).

Health and Human Services (HHS) Secretary's Emergency Response Team (SERT). This team's capabilities and functions include: 1) rapidly deploying to provide assistance to state and local jurisdictions responding to public health emergencies; 2) assessing the consequences of and providing technical support to health and medical response; 3) coordinating activities between affected state(s) and the Secretary of HHS; and 4) providing information from all sources to the Secretary's Command Center for passing to other operating divisions, agencies, departments, etc.

National Disaster Medical System (NDMS). The NDMS is an asset-sharing partnership designed to provide emergency medical assistance to states following a catastrophic disaster or other major emergency. The system is designed to care for survivors of any incident that exceeds the medical care capability of the affected local and state resources. Health and Human Services (HHS), in partnership with other federal agencies (e.g., DOD, DVA, FEMA), administers the program. The NDMS has three primary objectives:

Provide health, medical, and related social service response to a disaster area in the form of medical response units or teams and medical supplies and equipment.

Evacuate patients that cannot be cared for in the affected area to designated locations elsewhere in the nation.

Provide hospitalization in federal hospitals and a voluntary network of non-federal acute care hospitals that have agreed to accept patients in the event of a national emergency.

National Medical Response Teams (NMRT). The NMRTs are comprised of medical personnel. These teams are capable of agent identification, patient decontamination, triage, and medical treatment in support of local health systems.

Disaster Medical Assistance Teams (DMAT). Disaster Medical Assistance Teams (DMATs) consist of volunteer medical and support personnel and are designed to provide emergency medical care during a disaster or other unusual event. Level-1 DMATs are capable of deploying to disaster sites with adequate supplies and equipment to support themselves for a period of 72 hours while providing medical care at a fixed or temporary medical site. They may provide primary health care and/or augment overloaded local health care staff. In this regard, they are designed to be a rapid response element to supplement local medical care until other federal or contract resources can be mobilized, or the situation resolved.

Although DMATs are to consist of approximately 35 individuals, many teams consist of more than three times this number to provide redundancy for each job role to ensure that adequate personnel are available at the time of deployment.

Disaster Medical Assistance Teams (DMATs) are categorized according to four readiness levels. Level 1 teams must be able to fully deploy within eight hours of notification and be self-sufficient for 72 hours. Level 1 teams are deployed with sufficient equipment and supplies to treat up to 250 patients per day. The MI-1 DMAT is stationed at the Selfridge Air National Guard Base in Macomb County and is available to support response to WMD terrorism attacks anywhere in the state.

Disaster Mortuary Operational Response Teams (DMORT). The NRF tasks the NDMS under ESF 8 to provide victim identification and mortuary services. These responsibilities include temporary morgue facilities, victim identification, forensic dental pathology, forensic anthropology methods, processing, preparation, and disposition of remains. In order to accomplish this mission, the NDMS entered into a Memorandum of Agreement with the National Association for Search and Rescue (NASAR) to develop DMORTs.

Disaster Mortuary Operational Response Teams (DMORTs) are staffed by private residents, each with a particular field of expertise, who are activated in the event of a disaster. Teams consist of funeral directors, medical examiners, coroners, pathologists, forensic anthropologists, medical records technicians and transcribers, fingerprint specialists, forensic odontologists, dental assistants, X-ray technicians, mental health specialists, computer professionals, administrative support staff, security, and investigative personnel. The DMORT members are required to maintain appropriate certifications and licensure within their discipline. When members are activated, licensure and certification is recognized by all states, and the team members are compensated for their duty time by the federal government as a temporary federal employee. During an emergency response, DMORTs work under the guidance of state and local authorities by providing technical assistance and personnel to recover, identify, and process deceased victims. The DMORTs are directed by the NDMS in conjunction with a Regional Coordinator in each of the ten federal regions.

The NDMS, in support of the DMORT program, maintains a Disaster Portable Morgue Unit (DPMU) in Gaithersburg, Maryland. The DPMU is a depository of equipment and supplies for deployment to a disaster site. It contains a complete morgue with designated workstations for each processing element and prepackaged equipment and supplies.

Veterinarian Medical Assistance Teams (VMAT). The VMATs are the only response teams recognized in the NRF that provide veterinary medical treatment and address animal and public health issues resulting from natural, man-made, and technological disasters. The VMAT mission is to assist the local veterinary community with the care of animals and to provide veterinary oversight and advice concerning animal related issues and public health during a disaster or following a request from an appropriate agency.

Centers for Disease Control and Prevention (CDC). The CDC's capabilities include epidemiological surveillance, biological agent identification, and public health consultation and response. The CDC also coordinates the Strategic National Stockpile (SNS) program and provides epidemiological support to the State via Epidemiology Intelligence Service (EIS) officers.

Agency for Toxic Substance and Disease Registry (ATSDR). The mission of the ATSDR is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances. The ASTDR is directed by Congressional mandate to perform specific functions concerning the effect on public health of hazardous substances in the environment. These functions include: 1) public health assessments of waste sites; 2) health consultations concerning specific hazardous substances; 3) health surveillance and registries; 4) response to emergency releases of hazardous substances; 5) applied research in support of public health assessments; 6) information development and dissemination; and 7) education and training concerning hazardous substances.

Food and Drug Administration (FDA). The FDA provides regional laboratory support and surveillance assistance in support of public health.

HHS Office of Emergency Preparedness (HHS/OEP). The HHS/OEP coordinates HHS emergency preparedness, response, and recovery activities, which are directed at the public health and medical aspects of natural and technological disasters and terrorist events. The HHS/OEP also develops and refines plans to provide health services support to the DOD during military contingency operations. In addition, the HHS/OEP assists the National Transportation Safety Board (NTSB) in the aftermath of domestic commercial airline and other transportation accidents by providing DMORTs to work with the local coroner's offices in identifying victims, providing mortuary services, and assisting family members of the victims.

Commissioned Corps Readiness Force (CCRF). The CCRF is a response team consisting of health professionals (clinical and administrative) who are trained and ready to deploy quickly to the site of natural and technological disasters and terrorist events. The HHS/OEP coordinates the deployment of the CCRF and maintains the database of CCRF personnel.

Indian Health Service (IHS). The HHS/OEP coordinates the deployment of sanitarians and related assets. The IHS has responsibility for the HHS response to environmental and water quality issues. These individuals are available to respond to all incidents relating to the testing and purifying of rural wells and water systems.

Occupational Health and Safety Administration (OSHA). The HHS/OEP coordinates the deployment of OSHA health scientists and institutional inspectors for building inspections and internal environmental problems.

Community Health Centers (CHCs). The HHS/OEP coordinates the national network of Community Health Centers, Rural/Migrant Health Centers, and related HHS primary resources. These assets are available to be used during disasters (including WMD attacks), as appropriate.

Substance Abuse and Mental Health Services Administration (SAMHSA). The SAMHSA provides mental health support and crisis counseling during emergencies.

Administration on Aging (AOA). The AOA funds a wide variety of programs directed at meeting the health and social needs of the elderly. Some of these programs could be useful in addressing the needs of the elderly in the aftermath of a WMD attack.

Perry Point Depot. The U.S. Public Health Service's Perry Point Depot has a variety of pharmaceuticals and medical supplies available for use in national emergencies. Normally, the warehouse supplies are only for the use of federal agency programs.

Department of Defense (DOD).

United States Northern Command (NORTHCOM). The Commander, U.S. NORTHCOM has specific responsibilities for homeland defense and for supporting civil authorities. U.S. NORTHCOM's mission is to: 1) conduct operations to deter, prevent, and defeat threats and aggression aimed at the United States, its territories, and interests within the assigned area of responsibility and as directed by the President or Secretary of Defense; and 2) provide military assistance to civil authorities. U.S. NORTHCOM embodies the principles of unity of effort and unity of command as the single, responsible, designated DOD commander for overall command and control of DOD support to civil authorities within the U.S. NORTHCOM area of responsibility.

The Commander, U.S. NORTHCOM, takes all operational orders from and is responsible to the President through the Secretary of Defense. The DOD is the lead agency, supported by other agencies, in defending against traditional external threats/aggression (e.g., air and missile attack). However, against internal asymmetric, nontraditional threats (e.g., terrorism), the DOD may be in support of the DHS. When ordered to conduct homeland defense operations within U.S. territory, the DOD will coordinate closely with other federal departments/agencies. Consistent with laws and policy, the services will provide capabilities to support combatant command requirements against a variety of air, land, maritime, space, and cyber incursions that can threaten national security. These include invasion, computer network attack, and air and missile attacks.

Note: The purpose of homeland defense is to protect against and mitigate the impact of incursions or attacks on sovereign territory, the domestic population, and defense critical infrastructure.

Chemical / Biological Rapid Response Team (C/B-RRT). The C/B-RRT provides a graduated response ranging from pre-positioning prior to high-profile events, to assisting civil authorities with hazardous materials, to responding to a WMD terrorism incident. With a commander provided by the U.S. Army Soldier Biological and Chemical Command, the C/B-RRT's membership is drawn from existing organizations. Each organization has its own specialty, which allows the C/B-RRT commander to tailor the deployed team to the needs of the situation and the requirements of the joint force commander. This structure enables a rapid start to the consequence management efforts that will then receive necessary follow-on support to other departments/agencies. Components of the C/B-RRT include:

<u>Army Technical Escort Unit (TEU)</u>. The TEU provides the DOD and other federal departments/agencies with a unique, immediate response capability for chemical and biological warfare material. The TEU's missions include worldwide response for escorting, rendering-safe, disposing of, sampling verification, mitigating hazards, and identifying weaponized and non-weaponized chemical, biological, and hazardous material. The TEU is a member of the C/B-RRT.

<u>52nd Ordnance Group (EOD)</u>. The Group is prepared to deploy trained Explosive Ordnance Disposal (EOD) forces and exercise command and control of EOD operations to provide military support/assistance to civil authorities to detect, identify, render-safe, and dispose of unexploded ordnance, improvised explosive devices, and CBRNE incidents which threaten forces, residents, or operations in or outside the continental United States. Upon request, the Group will provide EOD support to the U.S. Secret Service and U.S. State Department.

Army Medical Research Institute for Infectious Diseases (USAMRIID). The USAMRIID conducts research to develop strategies, products, information, procedures, and training programs for medical defense against biological warfare threats and naturally occurring infectious diseases that require special containment.

Army Medical Research Institute for Chemical Defense (USAMRICD). The USAMRICD conducts research to discover and develop medical countermeasures to chemical warfare agents and to train and educate personnel in the medical management of chemical casualties.

Edgewood Research, Development and Engineering Center (ERDEC), Chemical Support Division (CSD). The Edgewood Center is the Army's principal research and development center for chemical and biological defense technology, engineering, and service. The CSD provides low-level monitoring using the Real Time Analytical Platform (RTAP), a vehicle containing a fully functional chemical analysis system. In its current configuration, the RTAP can automatically sample ambient air to detect the presence of specific chemical warfare agents (nerve and mustard).

Army Material Command (AMC) Treaty Laboratory. The AMC Treaty Laboratory provides an on-site analytical laboratory capability. The lab is capable of analyzing chemical surety materials, foreign chemical warfare agents, and all precursors and degradation by-products.

Army Medical Command (MEDCOM). The MEDCOM provides support to the C/B-RRT in the form of Medical, Chemical, and Biological Advisory Teams (MCBAT).

Naval Medical Research Institute (NMRI). The NMRI is primarily a research facility. Its Biological Defense Research Program (BDRP) has developed the ability to transport a biological field laboratory, expressly used in the identification of biological warfare weapons.

Navy Environmental and Preventive Medical Unit (NEPMU). The NEPMU provides Chemical, Biological, Radiological, Environmental Defense Response Teams (CBRED), to advise the C/B-RRT medical assets.

Marine Corps Chemical/Biological Incident Response Force (CBIRF). The concept for employment of the CBIRF details an initial rapid response to chemical or biological incidents. When such an incident occurs, the CBIRF will deploy to the affected site. Once there, the CBIRF will provide a number of significant initial consequence management capabilities, including: 1) assistance in coordinating initial relief efforts; 2) security and isolation at the affected site (when authorized); 3) detection, identification, and limited decontamination of personnel and equipment; 4) expert medical advice and assistance; and 5) service support assistance. Throughout its response, the CBIRF will be advised by civilian and government consultants in areas related to chemical or biological incidents.

Department of Veterans Affairs (DVA).

Health care and medical support. The DVA has registered pharmacists, nurses, and related health providers available to support the HHS/OEP in disaster response. The DVA is a partner in the NDMS with the HHS/OEP. The DVA has a wide array of medical personnel, equipment, and pharmaceuticals that can be available for the deployment during a national disaster.

Environmental Protection Agency (EPA).

On-Scene Coordinators (OSC). Under the authority of the National Contingency Plan, EPA OSCs coordinate all federal containment, removal, and disposal efforts during a hazardous material incident. The EPA OSCs work with state, local, and private responders to protect human health and the environment. The EPA has OSCs located nationwide. (The U.S. Coast Guard also has OSCs for incidents in coastal areas.) For site-specific assistance, the EPA OSCs can provide responders with access to any of the resources described below:

Environmental Response Team (ERT). The EPA's ERT can provide 24-hour access to special decontamination equipment for chemical releases and advice to the OSC in hazard evaluation, risk assessment, multi-media sampling and analysis, on-site safety, cleanup techniques, and more. The ERT has portable chemical agent instrumentation capable of detection and identification in the low and sub parts per million, as well as entry-level capabilities using Level "A" through "C" personal protective equipment.

Radiological Emergency Response Team (RERT). The EPA's RERT can provide on-site monitoring and mobile laboratories for field analysis of samples, along with expertise in radiation health physics and risk assessment. The RERT is accessible 24 hours per day.

Environmental Radiation Ambient Monitoring System (ERAMS). The EPA operates ERAMS for monitoring radioactivity in samples of precipitation, air, surface water, drinking water, and milk. In the event of a radiological emergency, sampling at the approximately 260 monitoring sites can be increased to provide information on the spread of contamination.

Radiation Environmental Laboratories. The EPA has two state-of-the-art radiological laboratories in Montgomery, Alabama, and Las Vegas, Nevada. By quickly characterizing radiation sources, they can offer advice on how best to protect public health in emergency situations.

EPA Research Laboratories. The EPA's 12 research laboratories offer programs in field monitoring, analytical support, and other technical support to quality assurance programs related to air, water, wastewater, and solid waste. Five of the laboratories are capable of deploying mobile units to a contaminated site for chemical and biological analysis.

National Enforcement Investigations Center (NEIC). The EPA's NEIC offers expertise in environmental forensic evidence collection, sampling, and analysis, computer forensics and information management, and enforcement-related technical analysis.

Department of Energy (DOE).

National Atmospheric Release Advisory Center (NARAC). The NARAC provides real-time computer predictions of the atmospheric transport of radioactivity from a nuclear incident.

Radiological Assistance Program (RAP). The RAP provides the initial DOE radiological emergency response. Under the RAP, there are several Radiological Assistance Teams (RATs) to assist in identifying the presence of radioactive contamination on personnel, equipment, and property at the incident scene. These teams also provide advice on personnel monitoring, decontamination, and material recovery.

Radiation Emergency Assistance Center/Training Site (REAC/TS). The REAC/TS provides 24-hour medical consultation on health problems associated with radiation accidents. It also provides training programs for emergency response teams comprised of health professionals.

Nuclear Incident Response Team (NIRT). The NIRT provides expert personnel and specialized equipment to a number of federal emergency response entities that deal with nuclear emergencies, nuclear accidents, and nuclear terrorism. This team consists of response personnel that are experts in such fields as device assessment and disablement, intelligence analysis, credibility assessment, and health physics.

Aerial Measuring System (AMS). The AMS provides helicopters and fixed-wing aircraft to respond to radiological emergencies. Its capabilities include aerial radiation surveys and search (gamma spectroscopy), real-time radiological aerial sampling, aerial photography survey, and aerial multi-spectra scanning surveys.

Federal Radiological Monitoring and Assessment Center (FRMAC). The FRMAC coordinates federal off-site radiological monitoring and assessment activities for a nuclear incident. (Refer to the Technological Disaster Procedures/Nuclear Power Plant Incidents section for more information on the FRMAC.)

Accident Response Group (ARG). The ARG is the technical response group for U.S. nuclear weapons accidents. The team provides equipment and technical assistance for weapon damage, risk assessment, safe recovery, packaging, transportation, and disposal of damaged weapons.

Office of Energy Assurance (OEA). The OEA leads the federal response to energy emergencies, guides technology research and development that will improve the security and reliability of the nation's energy systems, provides training and support for stakeholders, and works to assess and mitigate energy system vulnerabilities. The OEA conducts its program based on a foundation of partnerships with the DHS, other DOE programs, other federal groups, state and local governments, and private industry.

Department of Justice

Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). The ATF, a law enforcement organization within the U.S. Department of Justice enforces federal laws and regulations relating to alcohol, tobacco, firearms, explosives, and arson in cooperation and coordination with the FBI and state/local law enforcement. The ATF's Explosives Program provides resources to local communities to investigate explosives incidents through a network of National Response Teams, International Response Teams, and Arson Task Forces located in 15 major metropolitan areas across the country. These teams consist of ATF special agents, forensic and technical specialists, lab personnel, and canine units. The ATF plays a

lead role in the investigations of arson and bombing incidents, specializing in post-blast examination and cause/origin determination. The ATF's Explosives Program also maintains the Explosive Incident System, a computerized national repository for historical and technical data on explosives.

CIVIL DISTURBANCES – HUMAN-RELATED DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures in the case of a civil disturbance emergency.

Description of Civil Disturbances
Civil disturbances can be divided into two primary categories:

1. Otherwise lawful public demonstrations or gatherings, that escalate into a disruption of essential services or result in rioting, looting, or arson. Large-scale civil disturbances are usually an offshoot or result of one or more of the following events:
    a. Labor disputes where there is a high degree of animosity between the participating parties.
    b. High profile/controversial judicial proceedings.
    c. Implementation of controversial laws or other governmental actions.
    d. Resource shortages caused by a catastrophic event.
    e. Disagreements between special interest groups over a particular issue or cause.
    f. A perceived unjust death or injury to a person held in high esteem or regard.
    g. An unruly "celebration" of a sports team's important victory (or the opposite after a major loss).
2. Prison uprisings, which are normally the result of perceived injustice by inmates regarding facility rules, operating policies and/or living conditions. Insurrections may be started by rival groups or gangs within the facility.

Notification
The MSP/EMHSD notification of a significant civil disturbance normally comes from local government via direct contact with the MSP/EMHSD District Coordinator, MSP Operations, and/or submittal of information in the MI CIMS. Notification of prison uprisings may come from the affected local government, or more likely from the MDOC via direct contact by the EMC and/or submittal of information in the MI CIMS.

Assessment
Because of the potential danger involved, state/local assessment teams will not be dispatched during the actual disturbance itself. Rather, assessment information will be provided by first response agencies at the scene. State assessment efforts will focus on determining the: 1) location, nature, scope, magnitude, and expected duration of the incident; 2) actual or potential impacts to critical facilities/services in the affected area; 3) injuries and deaths; 4) property damage; and 5) anticipated state resource needs. Assessment information will normally come from the affected local community through the established emergency management system.

The primary means of transmitting assessment information is the MI CIMS. If the damage and impacts are particularly severe and/or widespread, MSP/EMHSD will assess the needs of the locals for conducting damage assessment activities after the disturbance has been quelled. The SEOC Planning Section and others in ESF 5 will collect, compile, synthesize, and analyze the incoming assessment information, per established procedure. (Refer to the Information and Planning ESF for more details on reporting forms and processes.)

The MDOC EMC will normally provide assessment information (via the MI CIMS) for prison uprisings–focusing on the situation occurring within the facility itself and immediately around the facility. The affected local community will provide assessment information on local impacts and response efforts via the MI CIMS.

Disaster-Specific Tasks: State Government
Governor's Office

1. The Governor can mobilize (by executive order or proclamation) Michigan National Guard (MNG) forces to provide additional assistance in suppressing the uprising and restoring order and control to the institution.

Department of Corrections (MDOC)

1. Suppress prison uprisings. The MDOC is primarily responsible for suppressing prison uprisings or hostage-taking incidents through use of MDOC riot control squads and other institutional security forces. The final decision to use deadly force to suppress the prison uprising rests with the MDOC, after consulting with the senior command officer of the MSP EST and/or MNG.

Department of Military and Veteran Affairs (DMVA)

1. In extreme cases, Michigan National Guard (MNG) forces may be mobilized to provide additional assistance in suppressing an uprising and restoring order and control.

Michigan State Police (MSP)

1. If necessary, the MSP Emergency Support Team (EST) will be mobilized (through MSP Operations) to provide technical/tactical advice and supplemental assistance in suppressing a prison uprising and/or hostage negotiation.
2. Monitor potentially dangerous situations and provide intelligence to local and state authorities. The MSP will monitor potentially dangerous situations that may lead to a major civil disturbance and provide relevant intelligence to appropriate federal, state, and local law enforcement agencies. Such information sharing may help prevent a major civil disturbance or at least help involved agencies and officials in preparing for an imminent disturbance.
3. Provide resource support to local authorities. Major civil disturbances will likely require MSP assistance with critical law enforcement activities such as crowd control, traffic and access control, arson prevention, critical facility security, riot control, and possibly hostage negotiation. The MSP troopers will be mobilized and dispatched for response from appropriate MSP districts in accordance with Official Orders No. 3 (Disaster Response), No. 4 (Emergency Mobilization), No. 66 (Emergency Support Team), and No. 80 (Strike Policy and Procedure).
4. As required, provide security for state/local assessment teams. In the aftermath of a major civil disturbance, state/local assessment teams will be dispatched to gather assessment data on the situation. If necessary, MSP troopers can be assigned to assist local law enforcement agencies in escorting the assessment teams through areas deemed to be potentially unstable.

CYBERATTACKS – HUMAN-RELATED DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures during a cyberattack disaster. Additional plans to be considered in a cyber incident include the Cyber Disruption Response Plan (CDRP) and Cyber Disruptions Response Team (CDRT).

Description of Cyberattacks

Computer systems are vulnerable to many threats – some of which can inflict significant harm to the system and result in loss of data, financial loss, loss of productivity, and in some cases perhaps even loss of life. Although often generically referred to as "cyber-terrorism", cyber-attacks are in fact much more varied than that term would indicate. Cyber-attacks include not only unlawful acts carried out by computer, but also physical attacks aimed specifically at computer systems. Each potential form of cyber-attack results in its own unique set of problems and impacts, and they vary greatly in terms of the harm that they can inflict. All cyber-attacks, no matter what form they take, have one commonality–they are a deliberate attempt by a perpetrator to manipulate a computer system to do something other than which it was intended, or to destroy the ability to use the system. Sometimes the effects are relatively harmless, but often they are not. The possibility of causing significant damage to the system and the data it contains–and public faith in the integrity and security of that system–is always present. (See table below on primary types of cyber-attacks.)

Primary Types of Cyber Threats

Threat	Description	Impacts if Successful
Modification of data in transit	Modification of transactions across networks.	Financial losses, inconsistent data, breakdown in public trust.
Denial of service	Attacks that slow servers or networks down or bring them to a halt.	Prevent business transactions, frustrate potential users, damage credibility.
Theft of information/ espionage	Penetration attacks resulting in theft of information/intelligence.	Breach of legal and regulatory requirements to maintain confidentiality, financial impacts, breakdown of public trust, damage credibility.
Unauthorized use of resources	Penetration of systems to allow attackers to utilize services – computers, phones, and data.	Financial loss, potential liability, compromise of systems and networks, potential "leapfrogging" (moving ahead in order of service).
Data tampering	Modification of content/format of web pages, data (e.g., tax, medical, criminal records).	Damage credibility, legal ramifications of falsification of data.
"Spoofing"	Impersonating an address internal to a network to gain access. Email impersonation.	Potential compromise or destruction of system, damage credibility.
"Sniffing"	Monitoring network traffic for information (passwords, credit card numbers, etc.)	Compromise or damage of systems and credibility.
Viruses / Internet vandals	Malicious programs and code capable of damage and self-replication.	Business expenses, system down time, lost productivity.
Disasters (natural, technological, human-caused)	Floods, fires, severe storms, acts of sabotage/terrorism that may damage cyber infrastructure.	Varies based on scope and severity, up to and including complete collapse of cyber infrastructure.
Physical intruders, vandalism, and theft of equipment	Destruction or theft of resources.	Business expenses, system down time, lost productivity.
Cyber Warfare	Deliberate offensive and defensive use of information and information systems to deny, exploit, corrupt, or destroy an adversary's information, information-based processes, information systems, and computer-based networks while protecting one's own. Primary means of conducting information warfare include: ➢ Psychological operations to affect the adversary's reasoning. ➢ Electronic operations to deny accurate information to the adversary. ➢ Deception operations to mislead about one's own capabilities or intentions. ➢ Physical destruction of the adversary's information networks and systems. ➢ Security measures to keep adversaries from learning about one's own capabilities and intentions. ➢ Information attack to directly corrupt an adversary's information without being detected.	Information warfare could utilize any of the threats listed in this table, conceivably achieving any or all of the impacts listed. Information warfare is most often used between nations or between major business competitors to gain an advantage in a major military operation or business competition.

Sources: Department of Technology, Management and Budget; Center for Strategic and International Studies; Institute for the Advanced Study of Information Warfare.

Scope

These procedures address cyberattacks aimed against or that significantly affect the State of Michigan government computing resources and information. They are not intended to address cyber-attacks that may occur against federal,

local, tribal, or privately-operated computer networks located in or servicing Michigan, unless those systems are connected with and considered an essential element of the State of Michigan computer network.

Notification
Notification of a cyber-attack against the State of Michigan computer network will normally come from the DTMB, which operates the network. In some cases, early indication of a potential cyber-attack may come directly from another state department/agency, most likely through its EMC. Notification of cyber-attacks against other networks (federal, local, tribal, or private) that are connected with the State of Michigan network will normally come from that system's administrator to the DTMB, which will forward the information to the MSP/EMHSD and other state departments/agencies. Notification of cyber-attacks against local computer networks (not connected with the State of Michigan network) will normally come from the affected local government via direct contact with the MSP/EMHSD District Coordinator, and/or submittal of information in the MI CIMS.

Assessment
Assessment of the nature, scope, magnitude, damage, and impact caused by a cyber-attack against or significantly affecting the State of Michigan computer network is a specialized task that must be carried out by system administrators from the DTMB and other affected departments/agencies under the direction of DTMB. The assessment will focus on determining the:

- Nature, scope, magnitude, and severity of the attack.
- Cause and source of the attack.
- Major functions and services disrupted and the anticipated duration of those disruptions.
- Potential health and safety risks associated with the attack and the measures required to address those risks.
- Immediate response and recovery needs.
- Anticipated cost of system repair and restoration.
- Measures needed to address and close the system vulnerability that allowed the attack to successfully occur in the first place.
- Public information messages that need to be disseminated to reassure the public that the situation is being addressed in the most expedient manner possible, and to inform the public regarding the specifics of the incident.

It is anticipated that most of the assessment information pertaining to a cyber-attack against or significantly affecting the State of Michigan computer network will come from the DTMB and affected departments/agencies. Local governments may provide information on the local impacts caused by any disruptions in essential state services or functions–including any impacts to private industry within the jurisdiction. That information will be provided to the MSP/EMHSD in the MI CIMS. The SEOC Planning Section will collect, compile, synthesize, and analyze the assessment information provided by the DTMB, other state departments/agencies, and local emergency management program jurisdictions. (Refer to the Information and Planning ESF for more details on reporting forms and processes.)

Disaster-Specific Tasks: State Government
All State Departments/Agencies:

1. Implement the computer security program as directed by the DTMB. Each state department/agency is responsible for implementing the computer security program designed by the DTMB to protect the State's computer network from cyber-attacks and physical harm. This includes, but is not necessarily limited to, the following elements:
    a. Providing appropriate staff and support to comply with DTMB's computer security program.
    b. Providing for training of staff in security awareness and security procedures.
    c. Developing, or assisting in developing, security policies, standards, and procedures, as directed by the DTMB.
    d. Developing, or assisting in developing, a Disaster Recovery Plan (DRP), a Business Resumption Plan (BRP), and other security plans as directed by the DTMB.
    e. Conducting, or assisting in conducting, risk assessments of department/agency facilities, networks, and systems as directed by the DTMB.
    f. Conducting, or assisting in conducting, security audits to record, examine, and review security-relevant activities and to verify and monitor compliance with security policies.
    g. Taking other security-relevant actions as directed by the DTMB.
2. Report cyber-attacks to the DTMB and take appropriate response actions. State department/agency CSOs and system administrators are responsible for reporting evidence of a cyber-attack to the DTMB, which will then undertake appropriate assessment, response, and recovery actions. State departments/agencies will invoke appropriate response and recovery actions as specified in their Disaster Recovery Plan and Business Resumption Plan.

Michigan State Police (MSP)

1. Coordinate the law enforcement investigation. In response to a cyber-attack against the State's computer network, the MSP will coordinate with the DTMB, MDAG, and other appropriate federal and local law enforcement agencies to investigate the criminal aspects of the attack and attempt to bring the perpetrators to justice.

Department of Technology, Management, and Budget (DTMB)

1. Develop and maintain a security program to protect the State's computer network from attack. The DTMB is responsible for working with all state departments/agencies to ensure that the appropriate level of security is implemented and maintained to protect the State of Michigan's government computing resources and information. As the architects and stewards of that effort, the DTMB works to:
    a. Enhance security awareness and education.
    b. Develop and enforce security standards, policies, and procedures.
    c. Conduct risk assessments and audits of facilities, security systems, and system usage.
    d. Promote and assist disaster recovery and business resumption planning efforts within departments / agencies.
    e. Develop an incident response capability that assures the most rapid and effective incident assessment and response possible.
    f. Recruit, screen, train, and direct the activities of the Michigan Cyber Civilian Corps (Cyber Corps).
    g. Ensure continuity of government through information technology (IT) planning, risk management and mitigation, incident response, and IT recovery operations.
    h. Assume the lead over all cyber security response efforts with enforcement authority.
2. Assess cyber-attacks. The DTMB is responsible for the timely identification and assessment of the nature, scope, magnitude, and anticipated duration of a cyber-attack against the State's computer network. The DTMB will conduct its own investigation and use information received from state department/agency Chief Security Officers (CSOs), system administrators, and other network affiliates in developing its assessment of the attack.
3. Develop and implement an appropriate response and recovery strategy for the attack. Once the DTMB has completed its attack assessment, the DTMB Director is ultimately responsible for developing and implementing a response and recovery strategy to prevent further system damage, to restore the system to its full operational status as quickly as possible, and to prevent similar attacks from occurring in the future by addressing identified system vulnerabilities. The DTMB Director may, at his/her discretion, declare a "disaster" (an internal DTMB designation) and direct DTMB staff to invoke and comply with the procedures documented in the Disaster Recovery Plan for the platform. State agency Data and Telecom Centers are authorized to enact actions deemed necessary to allow for the continuation of processing per the designated Business Resumption Plan.
4. Provide appropriate public information releases. If a cyber-attack disables the State's computer network and affects public access to the system, the DTMB will work with the SPIO, MSP/EMHSD PIO, and other department/agency PIOs as appropriate to develop and issue timely information releases about the situation.

DTMB – Michigan Cyber Civilian Corps

1. Michigan Cyber Civilian Corps assistance. The DTMB may, at its discretion, activate the Michigan Cyber Civilian Corps (Cyber Corps) for the purpose of assisting with or expediting the assessment of a cyber disruption. The Cyber Corps is a cadre of volunteer cyber security experts from government, business, and education that are registered with the DTMB as resources available to assist during state cyber emergencies. Activation of the Cyber Corps will be recommended by the DTMB when needed and is subject to approval by SEOC Incident Command staff. Once approved, the Cyber Corps will operate under the direction of the DTMB Chief Information Officer and will be tasked to support emergency response objectives according to the priorities of the SEOC.
2. Assist the DTMB in the assessment of cyber disruptions. The Cyber Corps will assist DTMB and State of Michigan personnel in the assessment of the cause, nature, scope, and effects of a cyber disruption affecting the State of Michigan. The Cyber Corps will operate at the direction of the DTMB CIO, and according to the Michigan Cyber Civilian Corps Standard Operating Procedures (SOPs). The Cyber Corps mission will be in direct support of the DTMB's overall emergency response mission as directed by the SEOC.
3. Assist the DTMB in developing a recovery strategy for the cyber disruption. The Cyber Corps will support DTMB's mission to recover as quickly as possible from the effects of a cyber disruption affecting the State of Michigan. The activities of Cyber Corps members may include planning, resource identification and specification, programming, and outreach.
4. Assist the DTMB in the restoration of State of Michigan networks and systems to operating status. The Cyber Corps may be called upon to assist with or expedite the recovery of key networks and cyber resources to fully operational status in order to serve the public interest or respond to an emergency. The activities of the Cyber Corps may include technical services, programming, system design, troubleshooting, hardware and software support and installation, site work, commissioning, and/or repair.

5. Assist the DTMB in the prevention of future cyber disruptions. The Cyber Corps may be called upon to initiate mitigation measures to safeguard Michigan's IT infrastructure from disruptions related to an emergency. The Cyber Corps mitigation activities may include outreach, notification, system design, modifications, programming, technical support, hardware and software support, site work, commissioning, and/or system modifications to prevent similar attacks or disruptions from affecting State of Michigan IT infrastructure.

DROUGHT – NATURAL DISASTER

In addition to the general task assignments and procedures listed in the base plan, consider the following tasks and procedures if a drought occurs.

Description of Drought Disaster
Drought is the consequence of a natural reduction in the amount of precipitation expected over an extended period of time, usually a season or more in length. Its multi-faceted nature makes it difficult to predict when and where one is likely to occur. Significant technical knowledge is often required to understand the intricacies of drought and its many and often far-reaching effects.

Scope
The severity of a drought depends not only on its location, duration, and geographical extent, but also on the water supply demands made by human activities and vegetation. Droughts are difficult to assess because drought conditions and impacts are often less obvious than other natural hazards, and they are typically spread over a much larger geographic area.

Notification of Drought. The exact beginning of a drought may be difficult to determine since its effects may accumulate slowly or be felt in a variety of insidious manners. For this reason, many federal agencies monitor for potential drought conditions and may issue notifications. The MSP/EMHSD and MDARD maintain regular management contact with many of these agencies and regularly monitor their reports. The MSP/EMHSD also monitors the National Drought Mitigation Center (NDMC) web site (maintained by the University of Nebraska-Lincoln), considered the preeminent drought research and information center in the United States. Other state departments such as EGLE, MDNR, and MDHHS-Health also monitor various aspects of drought and will notify the MSP/EMHSD as warranted.

Assessment
Multi-Agency Assessment. For these reasons, state-level drought assessment and response will normally be accomplished by a multi-agency task force with subject matter expertise coordinated by the MSP/EMHSD. These efforts will assist the task force in determining the nature, scope, magnitude, and expected duration of the drought, the potential impacts to the affected population (with emphasis on those groups at greatest risk), anticipated economic and social consequences, potential/anticipated impacts to critical facilities and services, and anticipated state and federal assistance requirements.

Assessment team members will collect and compile relevant assessment information from their own respective departments/agencies, as well as counterpart federal agencies and private organizations. In addition, affected local governments will provide much of the information regarding specific local impacts (actual/potential/anticipated) in the MI CIMS. The SEOC Planning Section and other ESF 5 members will collect, compile, synthesize, and analyze the incoming assessment information. (Refer to the Information and Planning ESF for more details on reporting forms and processes.)

General Response
Generally, a coordinated, multi-agency state response to drought will not occur until drought conditions begin to significantly impact individuals and communities and supplemental state assistance is required. Local governments may take appropriate preventive actions on their own (e.g., issuing water usage restrictions) to address local conditions as required. Once the drought conditions affect the entire state or a major portion of the state and a state-level response is required, the MSP/EMHSD will notify appropriate state departments/agencies to report to the SEOC to develop, implement, and coordinate a response.

Disaster-Specific Tasks: State Government
Governor's Office

1. If necessary, the MDNR will request the Governor to issue a proclamation to restrict outdoor burning to mitigate the potential for wildfire in all or part of the state. Such a proclamation restricts smoking, fireworks, and outdoor burning activities to approved locations.

Michigan Department of Agriculture and Rural Development (MDARD)

1. Assess the impact of drought on the state's agricultural industry**.** The various MDARD divisions can provide information on drought-related impacts to agricultural crops, livestock, and general agricultural operations, for the purpose of assessing the extent and magnitude of a drought emergency. The MDARD may obtain its information from a variety of sources including direct field observations and assessments, federal agricultural agencies, agricultural organizations, and affected elements of the agricultural industry. MDARD assessment information will be provided to the MDARD EMC for submittal to the MSP/EMHSD.

Department of Environment, Great Lakes, and Energy (EGLE)

1. Assess the impact of drought on the state's public water distribution systems. Prolonged periods of extreme drought can cause severe water shortages and adversely affect the quantity and quality of both surface and subsurface drinking water sources. As appropriate, EGLE will work with local health departments and water utilities to monitor and assess the impacts of drought on public water distribution systems. Special emphasis will be placed on those systems that are experiencing significant water shortages or have the potential to experience such shortages because of the water source involved, a large service population, or other pertinent factors. EGLE assessment information will be provided to the EGLE EMC for submittal to the MSP/EMHSD.

Department of Health and Human Services (MDHHS) – Health

1. Support local assessments of mental health needs of farmers and others severely impacted by drought. Community Mental Health Services Programs (CMHSPs) are responsible for ensuring that an adequate needs assessment is conducted to determine the psychological impact of drought on farmers and others severely impacted by drought, and to provide recommendations for appropriate action. Normally, personnel from the affected CMHSP will conduct this needs assessment. Whenever possible, the needs assessment will be conducted as part of the local government's initial disaster assessment process. The MDHHS-Health will provide technical assistance and support as requested and available.
2. Support the provision of crisis counseling services for farmers and others severely impacted by drought. CMHSPs will provide crisis counseling services for farmers and others severely impacted by drought. This will be done in cooperation with private sector mental health service providers and NGOs such as the American Red Cross. The MDHHS-Health will provide technical consultation and supplemental assistance as requested and available. The MDHHS-Health also participates in the Traumatic Incident Stress Management (TISM) program that is coordinated by the DTMB. The MDHHS-Health will rely on the TISM program to address the mental health needs of its own personnel adversely impacted by the drought and/or drought response and recovery operations.

Department of Natural Resources (MDNR)

1. Monitor wildfire threats during periods of extreme drought. The MDNR continuously monitors wildfire threats in the state–especially during prolonged periods of extreme drought when wildfire danger may be at its highest. The MDNR widely publicizes wildfire threat information at state parks and other MDNR facilities, at MDOT tourist welcome centers, social media, and other media means.
2. Provide assessment information on the impacts of extreme drought on wildlife and other natural elements. The various MDNR divisions can provide information to the MSP/EMHSD on the impacts of extreme drought on wildlife, trees and vegetation, waterways, and other natural elements, for the purpose of assessing the extent and magnitude of a drought emergency. The MDNR may obtain its information from a variety of sources including direct field observations and assessments, federal agencies, private organizations, and affected elements of relevant industries.

Michigan State Police - Emergency Management Homeland Security Division (MSP/EMHSD)

1. Coordinate multi-agency assessment team to address drought-related conditions and impacts with a multi-disciplinary approach. This team will investigate and assess the impacts of the drought, and to develop appropriate response and recovery strategies and actions for the given circumstances. The team will work out of the SEOC.

Department of Transportation (MDOT)

1. Provide commercial marine transportation information. Prolonged drought may cause a significant decrease in Great Lakes and connecting waterways water levels, severely impacting the Great Lakes shipping industry and other forms of maritime transportation. The MDOT will coordinate with the USCG and USACE, Great Lakes shipping associations, and maritime transportation operators to monitor and assess drought-related impacts to these vital water transportation systems. MDOT assessment information will be provided to the MDOT EMC for submittal to the MSP/EMHSD. (Refer to the Resource Support ESF.)

EARTHQUAKES – NATURAL DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures in an earthquake disaster.

Description of Earthquakes
Earthquakes are the result of two blocks of earth moving past each other suddenly. The surface at which the two blocks glide past each other is called a fault or fault plane; the location below the earth's surface where the earthquake originates is called the hypocenter and directly above the hypocenter on the surface is the epicenter. Sometimes before an earthquake occurs, smaller earthquakes known as foreshocks may occur. The main earthquake is called the mainshock and following that are a series of aftershocks (smaller earthquakes in the same location as the mainshock). Earthquakes may be predicted to an extent due to foreshocks exceedance of probably in a certain number of years combined with historical data. Earthquakes violently shake the ground and all things upon it, which may lead to the destruction of buildings, infrastructure, life, and safety. In Michigan, the largest known nearby threat includes the New Madrid fault and Earthquake Zone.

Scope
Although there are fault lines in the bedrock of Michigan, they are now considered relatively stable and a minimal threat for causing damaging earthquakes. The greatest threat for Michigan lies in distant earthquakes that may occur in the New Madrid Seismic Zone, and to a lesser extent in upstate New York. Based on recent scientific studies, portions of southern Michigan may be affected should a major earthquake occur in the New Madrid Zone. However, the impacts to structures would likely be minimal at best and mostly cosmetic in nature in well designed and constructed buildings. Poorly designed and constructed buildings could suffer some damage under the right circumstances. Should impacts be severe enough to impact the nuclear power plants in Michigan response and recovery activities identified in the Nuclear Power Plant annex will need to be implemented.

Another impact on the state could come from damage occurring outside of Michigan to certain natural gas and petroleum pipelines. These would typically originate in the Gulf of Mexico region and enter Michigan along its southern border. Such infrastructure failures could cause temporary but severe fuel shortages which could especially jeopardize health if they happened during winter heating months. A temporary cutoff of natural gas and petroleum supplies in the summer would also impact energy usage, and gasoline shortages would be problematic regardless of the time of year.

Notification
The MSP/EMHSD notification of a significant earthquake in the New Madrid Seismic Zone will likely come first from media reports. Early notification may also come from FEMA through existing notification channels, and possibly from affected local governments (if damaged occurred) via direct contact with the MSP/EMHSD District Coordinator and/or submittal of information in the MI CIMS. If natural gas or petroleum pipelines are damaged, notification of that may come from the MDLARA (Michigan Public Service Commission – MSPC) or from the utility or pipeline company (directly or via MSP Operations). Likely, notification will be received through a combination of these sources.

A seismic event can also trigger a nuclear power plant emergency classification (i.e., Unusual Event; Alert; Site Area Emergency; General Emergency) and thus notification may come via MSP Operations under that system. (Refer to the Technological Disaster Procedures / Nuclear Power Plant Incidents.)

Assessment
Earthquake damage in Michigan is expected to be minimal, even if a major earthquake occurs in the New Madrid Zone. Damage to natural gas and petroleum pipelines could occur, and some poorly designed and constructed buildings in the extreme southern portions of the state could suffer physical damage if the earthquake is particularly severe. Assessment information will come from the affected local communities and involved state departments/agencies–e.g., MPSC for pipelines and interface with utilities/pipeline companies; EGLE for general geological information and United States Geological Survey (USGS) information – through the established emergency management system. The primary means of transmitting assessment information would be via MI CIMS. The SEOC Planning Section will collect, compile, synthesize, and analyze the incoming assessment information, per established procedure. (Refer to the Information and Planning ESF for more details on reporting forms and processes.)

Disaster-Specific Tasks: State Government
Department of Environment, Great Lakes, and Energy (EGLE)

1. Coordinate with the USGS regarding earthquake damage and impacts. The EGLE will coordinate with the USGS to determine the nature, scope, magnitude, damage, and impact of an earthquake in the New Madrid Seismic Zone or elsewhere that affects Michigan. The EGLE can also assist in assessing earthquake damage to oil and gas wells and gathering lines (pipelines that run from an oil / gas production facility to a pre-processing plant).

The EGLE inspectors can provide technical advice and assistance in determining the nature of the damage, its expected duration and anticipated impacts, appropriate protective actions, and the approximate cost of any property damage that may have occurred. Assistance can be provided in the field by an on-scene assessment team, in the SEOC as part of the Planning Section, or both.

LARA - Michigan Public Service Commission (MPSC)

1. Monitor and assess natural gas and petroleum pipelines for earthquake damage. The MPSC, through its regular management contacts with natural gas utilities, petroleum pipeline companies, and the Pipeline and Hazardous Materials Safety Administration (PHMSA) will monitor the impacts of an earthquake on natural gas and petroleum pipelines located in or providing product to Michigan. The MPSC has staff that can assist in assessing damage to natural gas and petroleum pipelines. The MPSC inspectors can provide technical advice and assistance in determining the nature of the damage, its expected duration and anticipated impacts, appropriate protective actions, and the approximate cost of damage that may have occurred to the pipeline and/or related infrastructure. Assistance can be provided in the field by an on-scene assessment team, in the SEOC as part of the Planning Section, or both. (Refer to the Technological Disaster Procedures – Oil and Gas Well / Pipeline Accidents.)
2. Coordinate a State of Energy Emergency declaration. If an earthquake significantly damages natural gas and petroleum pipelines leading into the state to such a degree that there is a potential for significant disruption of energy supplies in Michigan, the MPSC Chair may recommend the declaration of a “State of Energy Emergency”. Under such a declaration, the Governor may restrict the use and sale of energy resources and direct supplies to meet essential services, among other actions. (Refer to the Technological Disaster Procedures/Energy Emergencies.)

Additional Sources:

United States Geological Services. “*Earthquake Hazards*.” USGS.gov. www.usgs.gov/natural-hazards/earthquake-hazards. Accessed 1 Nov. 2021.

ENERGY EMERGENCY – TECHNOLOGICAL DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures during an energy emergency disaster.

Description of Energy Emergency
Energy Emergencies can typically be defined in one of three ways:

1. Physical damage to energy infrastructure. This may be caused by severe storms or other natural hazards, aged equipment, or be due to human activity (poor maintenance, operator error, or sabotage).
2. Energy shortages due to insufficient production or delivery. This is frequently caused or complicated by global conflict, product hoarding, or dramatic prices increases.
3. Mobilization of U.S. Defense Forces. National defense may demand a prioritized increase in energy usage during wartime or other times of mass mobilization.

Notification
The Michigan Public Service Commission (MPSC) of the MDLARA is responsible for energy emergency planning, preparedness, response, and recovery in Michigan. This includes energy supply monitoring and notification of the MSP/EMHSD when a situation threatens or begins to impact the State's energy profile. The National Weather Service also monitors weather and reports predicted weather patterns that are frequently associated with potential damage to energy infrastructure.

Other Plans and Annexes
The Michigan Petroleum Shortage Response Plan - developed and maintained by the MPSC. The plan outlines a series of options that could be considered if Michigan is faced with a serious petroleum shortage, including measures designed to manage limited supplies and to reduce the demand for petroleum products.
The Michigan Energy Security/Assurance Plan - developed and maintained by the MPSC. The plan provides guidance for energy emergency preparedness and response planning in Michigan. It identifies the role state government will play in response to an energy emergency, relevant legal authorities, emergency procedures and other curtailment plans, and key contacts at the MPSC and other state and federal government agencies who are responsible for energy emergency preparedness and response.

Disaster-Specific Tasks: State Government
Governor's Office

1. The Governor may declare a State of Energy Emergency, restricting the use and sales of energy resources and directing supplies to meet essential services as necessary. The State of Energy Emergency remains in effect for the duration of the emergency or 90 days, whichever is shorter, and may be extended upon approval of the Michigan Legislature (it may be terminated by a majority vote of both houses of the Legislature). The Governor is authorized the following powers when a State of Energy Emergency declaration is in effect:
    a. Order specific restrictions on the use and sale of energy resources, which may include:
        i. Restrictions on the interior temperature of buildings.
        ii. Restrictions on the hours and days during which buildings may be open.
        iii. Restrictions on the conditions under which energy resources may be sold.
        iv. Restrictions on lighting levels and the use of display and decorative lighting.
        v. Restrictions on the use of privately owned vehicles or a reduction in speed limits.
        vi. Restrictions on the use of public transportation, including directions to close a public transportation facility.
        vii. Restrictions on the use of pupil transportation programs operated by public schools.
    b. Direct an energy resource supplier to provide an energy resource to a health facility; school; public utility; public transit authority; fire or police station or vehicle; newspaper or television or radio station, for the purpose of relaying emergency instructions or other emergency message; food producer, processor, retailer, or wholesaler; and to any other person or facility which provides essential services for the health, safety, and welfare of Michigan residents.
2. By Executive Order, suspend a statute or an order or rule of a state agency or a specific provision of a statute, rule, or order, if strict compliance with the statute, rule, or order or a specific provision of the statute, rule, or order will prevent, hinder, or delay necessary action in coping with the energy emergency.
3. In addition to declaring a State of Energy Emergency under 1982 PA 191, the Governor may also declare a State of Emergency or State of Disaster under 1976 PA 390, as amended (Michigan Emergency Management Act), and direct necessary actions through the MSP/EMHSD. In that scenario, the MPSC will play a support role with situation monitoring, crisis communications, public education, and other support activities.

LARA - Michigan Public Service Commission (MPSC)

1. Energy Supply Monitoring. Understanding and responding appropriately to an energy emergency depends on the availability of quantified information. For that reason, the MPSC monitors Michigan's energy supply system to detect unusual imbalances that may indicate the potential for an energy emergency and advises appropriate state officials of such events. The MPSC tracks energy developments and trends through industry contacts, the U.S. Department of Energy (DOE) and Energy Information Administration (EIA), and various web sites, trade publications, and statistical reports. Historical and forecasted data are published by the MPSC semi-annually in the "Michigan Energy Appraisal" which provides an overview of the balance between energy supply and demand in Michigan and across the region. In the event of an actual or anticipated energy emergency, special updates to this basic publication can be issued as required to aid in decision making during the response effort.
2. Advise the Governor of impending energy emergencies. In the event of an impending energy emergency, the MPSC is required to review the status of the developing energy shortage/disruption and make appropriate recommendations to the MPSC Chair who will make recommendations to the Governor. The MDHHS and MPSC staff and EMC will make recommendations to the MPSC Chair, on actions the Governor might consider alleviating the negative impacts of the energy emergency.
3. Public Information and Crisis Communications. As part of its energy emergency planning program, the MPSC maintains a public information program designed to minimize confusion and uncertainty as well as enlist the support and cooperation of the public during an actual or anticipated energy emergency. The public information program will be implemented at the discretion of the MPSC Chair and/or Governor at such time as a government response (using voluntary and/or mandatory measures) is required. The program will provide information on: 1) ways to minimize use of energy and the inconveniences resulting from a disruption; 2) voluntarily curbing electric use during peak demand periods when generation and power purchases may not be sufficient to meet demand; and 3) the problems associated with, and steps being taken in response to, the energy emergency. Public information activities will be coordinated through the state JIT/JIC.
4. Coordination with Energy Industries (petroleum, natural gas, and electric) concerning Michigan's energy situation and level of emergency preparedness.
5. If a national energy emergency occurs, the MPSC will be the primary coordinating agency with the DOE – the federal agency responsible for national energy contingency planning and response in the event of a nationwide energy shortage.
6. Of particular concern to the MPSC is preparedness for a disease pandemic – specifically pandemic influenza – and the impacts that such an incident might have on energy industries and their ability to maintain operations and provide services. The MPSC preparedness efforts for pandemic influenza focus primarily on coordinating with the energy industries to promote planning for pandemic influenza and participating itself in the State's multi-agency pandemic influenza planning effort.
7. Coordinate energy emergency activities. The MPSC Chair may convene the MPSC's internal Energy Emergency Management Team (EEMT) to coordinate response to an actual or anticipated energy emergency. Energy emergencies involving petroleum products, electricity, and natural gas supplies require specific actions unique to each, and those actions are listed in the emergency plan developed for each energy source. In addition, the MPSC has developed a list of response actions that are the same regardless of the energy source involved. The MPSC response to an energy emergency can be described in five levels – each level specifying an appropriate level of mobilization to address a potential or developing emergency situation:

MPSC Response Levels for an Energy Emergency

Response Level	Response Actions
LEVEL 1 (LOW) – Stand-by Alert	• Increase monitoring • Open industry communications • If event is out of state, open communications with Energy Emergency Assurance Coordinators (EEAC) • Alert MPSC Emergency Response Team (ERT)
LEVEL 2 (MEDIUM) – ECC Activation	• Activate MPSC Emergency Coordination Center (ECC) • Assemble/brief ERT • Alert MPSC EEMT and MDLARA EMC • Increase monitoring via Energy Supply Disruption Tracking Process • Assess interdependencies, alert Michigan Intelligence Operations Center (MIOC)
LEVEL 3 (MEDIUM) – Pending/Declared Energy Emergency	• Expand/update monitoring • Expand communications network • Review MPSC responsibilities in MEMP • Initiate ERT consequence assessment • Initiate public information program • EEMT to discuss voluntary and mandatory counter measures • Draft State of Energy Emergency declaration
LEVEL 4 (HIGH) – Pending/Declared State Disaster	• Review MEMP responsibilities, especially related to coordinating energy emergency activities and the repair and restoration of damaged energy infrastructure • Monitor situational awareness via the MI CIMS • Support MDLARA EMC and SEOC, as requested • Support JIC, as requested
LEVEL 5 (HIGH) – Declared National Disaster	• Support SCO, FCO, and JFO • Support FEMA RRCC and DOE ESF 12 Team Lead • Support local, state, and federal Disaster Recovery Coordinators • Update DOE on situational awareness

EXTREME TEMPERATURES – NATURAL DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures during an extreme temperature disaster.

Description of Extreme Temperature Disaster
Extreme temperatures may result in an emergency situation when they begin to cause an unusually high number of temperature-related injuries or deaths, although they may also result in property or environmental damage. These may be the result of excessively high temperatures, which may also be associated with drought conditions, or excessively cold temperatures, mostly resulting from various impacts of freezing conditions. An increased risk of wildfire is often associated with extreme temperatures.

Notification
The MSP/EMHSD notification of emergency situations caused by extreme temperatures may come from:

1. The NWS via email, call, emergency support message, direct contact with MSP/EMHSD District Coordinators or SEOC staff.
2. Affected local governments via direct contact with the MSP/EMHSD District Coordinator, MSP Operations, and/or submittal of information in the MI CIMS.
3. Local health care providers and health departments via MDHHS-Health surveillance systems (e.g., Health Alert Network).
4. State and local human service agencies (e.g., MDHHS-Human Services, Area Agencies on Aging).
5. Media reports.

Assessment

1. State department/agency assessment information will be submitted via the MI CIMS.
    a. Deaths and Injuries. Assessment information for extreme temperature emergency situations will come primarily from state/local health agencies, human service agencies, and health care providers. The MDHHS-Health can provide information on the number of extreme temperature-related deaths and injuries, as reported by local hospitals and health care providers. The AASA can provide information on the impacts of extreme temperatures on the elderly, as reported by the network of Area Agencies on Aging. Relevant assessment information from AAAs will be provided to the MSP/EMHSD via the MI CIMS by the AASA EMC. In some cases, the information will also be submitted via the MI CIMS by the affected local emergency management program jurisdiction(s) as part of the local damage assessment summary. The MDHHS-Human Services can provide information on the impacts of extreme temperatures on the individual and family clients under their supervision, as reported by the county MDHHS offices.
    b. Property/Environmental Damage. The EGLE can provide assessment information on the impacts of extreme cold on water and sewer infrastructure (e.g., frozen/broken pipes from deep ground freeze). The MDARD can provide information on the impacts of extreme heat on agricultural crops and livestock. The MDNR can provide information on the impacts of extreme heat and cold on wildlife, vegetation, and other natural elements. A number of federal agencies may also be able to provide assessment information and background climatic data, including the National Oceanic and Atmospheric Administration (NOAA) and FEMA.

Disaster-Specific Tasks: State Government
Governor's Office

1. If necessary, the Governor may issue an outdoor burning ban to mitigate the potential for wildfire in all or part of the state if high temperatures result in an increased fire risk. Such bans restrict smoking, fireworks, and outdoor burning activities to approved locations.

Michigan Department of Agriculture and Rural Development (MDARD)

1. Provide assessment information on the impacts of extreme temperatures on agricultural crops and livestock. The MDARD will provide information to the MSP/EMHSD on the impacts of extreme temperatures on agricultural crops, livestock, and general agricultural operations, for the purpose of assessing the extent and magnitude of an extreme temperature emergency situation. Michigan Department of Agriculture and Rural Development (MDARD) assessment information will be provided to the MDARD EMC for submittal to the MSP/EMHSD via the MI CIMS.

Department of Environment, Great Lakes, and Energy (EGLE)

1. Monitor the potential negative impacts of extreme cold on water and sewer infrastructure. Department of Environment, Great Lakes, and Energy (EGLE), as stewards of the state's public water distribution and sewer

infrastructure, will work with local utilities and service providers to monitor the negative impacts of prolonged cold temperatures on these systems and recommend needed measures to protect their operational and structural integrity. As appropriate, the applicable EGLE district office will issue "let-run" advisories to the affected local governments (through the utility/service providing agency and local health department), recommending that system users let water run continuously through their pipes to prevent freeze-ups and broken pipes. A local community will make the final determination on whether to actually implement an EGLE advisory (let-run actions will be initiated and terminated locally).

Department of Health and Human Services (MDHHS) – Health

1. Serve as lead state agency on human health issues. The MDHHS-Health and local/district health departments across the state have a wide array of programs and initiatives in place to protect the health, safety, and well-being of Michigan's residents. (Refer to the Health and Environmental Protection ESF.)
2. Coordinate the identification, investigation, and control of public health emergencies. The MDHHS-Health primary activities include surveillance, rapid identification, risk communication, and coordination of rapid response to outbreaks of communicable diseases (especially epidemics), chemical incidents that pose a threat to human health, and other imminent dangers to public health. The MDHHS Director and local public health officers have the authority (under the Michigan Public Health Code–1978 PA 368, as amended) to take those steps determined necessary and prudent to prevent epidemics and the spread of hazardous communicable diseases, or to effectively mitigate other conditions or practices that constitute a menace to public health. The MDHHS Director and local public health officers can issue written orders to implement the required preventive steps and/or response, and those orders can be enforced through the imposition of civil and criminal penalties for failure to comply.

Department of Health and Human Services (MDHHS) – Human Services

1. Assist local human service officials in establishing heating or cooling centers, as required. During prolonged periods of extreme heat or cold, many local communities will establish heating or cooling centers to provide relief to those residents deemed most at risk from temperature-related injury or death. Typically, heating and cooling centers are established and operated by local human service agencies. As appropriate, the affected MDHHS county office (as part of the local human service disaster response team) will assist the involved agencies in establishing and operating these centers. The MDHHS will also help publicize the availability of these centers through its regular client notification/referral systems.
2. Provide assessment information on the impacts of extreme temperatures on individual/family clients. As appropriate, county MDHHS-Human Services offices will provide information on the impacts of extreme temperatures on its clients. This information will be provided to the MSP/EMHSD via the MI CIMS by the MDHHS-Human Services EMC. In some cases, the information will also be submitted via the MI CIMS by the affected local emergency management program jurisdiction(s) as part of the local damage assessment summary.
3. Mental Health Code, Medical Examiner Code.

MDHHS - Aging and Adult Services Agency (AASA)

1. Monitor the negative impacts of extreme temperatures on the elderly. The AASA will monitor the negative impacts of extreme temperatures on the elderly through its network of Area Agencies on Aging (AAAs) across the state. Each AAA regularly monitors and provides services to the elderly population within its service area through a variety of programs–including homebound elderly persons. Through these regular contacts, AAAs are able to monitor the condition of its elderly clients and possibly prevent extreme temperature-related injury or death through proper preventive measures. The AAAs are also able to monitor the impacts of extreme temperatures on its client base and make determinations about possible impacts to the elderly population in general within its service area. Each AAA maintains detailed statistics on the number and general location of elderly residents within its service area.

Department of Natural Resources (MDNR)

1. Monitor wildfire threats during periods of extreme heat. The MDNR continuously monitors wildfire threats in the state–especially during prolonged periods of extreme heat and low humidity when wildfire danger may be at its highest. The MDNR widely publicizes wildfire threat information at state parks and other MDNR facilities, at MDOT tourist welcome centers, and through the media.
2. If necessary, the MDNR will request the Governor to issue a proclamation to restrict outdoor burning to mitigate the potential for wildfire in all or part of the state. Such proclamations restrict smoking, fireworks, and outdoor burning activities to approved locations.

FLOODING – NATURAL DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures during a flooding disaster.

Description of Flooding
In Michigan, the primary flooding hazards are: 1) dam failures that result in downstream flooding; 2) riverine flooding (e.g., the overflowing of rivers, streams, drains, and lakes due to excessive rainfall, rapid snowmelt, or ice); 3) Great Lakes shoreline flooding caused by high Great Lakes water levels, storm surges, or winds; and 4) urban flooding caused by failure of storm drainage infrastructure. This section addresses dam failures, riverine flooding, and Great Lakes shoreline flooding. Urban flooding is addressed in the Infrastructure Failures section.

Notification
The MSP/EMHSD notification of a flood normally comes from local government via direct contact with the MSP/EMHSD District Coordinator, MSP Operations, and/or submittal of information in the MI CIMS. In some cases, notification may come directly from an involved state and/or federal department/agency (e.g., MDNR, USACE, NWS, etc.).

Assessment
Assessment of flooding will focus primarily on determining the: 1) location, scope, magnitude, and expected duration of the flood event; 2) number of injuries and deaths; 3) property, environmental, and agricultural damage incurred; 4) impacts to critical infrastructure, facilities, and services; 5) economic and social consequences (actual/potential/anticipated); and 6) anticipated resource needs of the response and recovery operation. The primary means of transmitting assessment information to the SEOC is the MI CIMS. The SEOC Planning Section and others in ESF 5 will collect, compile, map, synthesize, and analyze the incoming assessment information, per established procedure. (Refer to the Information and Planning ESF for more details on reporting forms and processes.) For widespread and/or particularly severe flooding, the MSP/EMHSD Recovery Unit will coordinate damage assessment needs with the MSP/EMHSD District Coordinator and local emergency management coordinators.

Disaster-Specific Tasks: State Government
Department of Environment, Great Lakes, and Energy (EGLE)

1. Promote and administer a state dam safety program. Both EGLE and the FERC classify and regulate dams in Michigan. Under state and federal legislation, certain dam owners are required to develop a survey of the downriver area, develop flood prone area maps, develop emergency action plans (EAPs), and exercise these plans. In Michigan, approximately 70 dams fall under the federal requirement, and approximately 240 come under Michigan regulations requiring EAPs.
   Note: Part 315, Dam Safety, of the Natural Resources and Environmental Protection Act (1994 PA 451), as amended, provides for the inspection of dams. This statute requires EGLE to rate each dam as either "high", "significant", or "low" hazard potential, according to the potential downstream impact if the dam were to fail (not according to the physical condition of the dam). EGLE has identified and rated over 2,400 dams. Dams over six feet in height that create an impoundment with a surface area of more than five acres are regulated by this statute. Dam owners are required to maintain an EAP for "high" and "significant" hazard potential dams. Owners are also required to coordinate with local emergency management officials to assure consistency with local emergency operations plans. Dams regulated by the FERC, such as hydroelectric power dams, are generally exempt from this statute.
2. Promote and administer the National Flood Insurance Program. EGLE promotes and administers the NFIP, which makes flood insurance available in those communities agreeing to regulate future floodplain development. In return for adopting floodplain management regulations, the federal government makes flood insurance available to residents of the community.
   Note: In 1973, the NFIP was amended to mandate the purchase of flood insurance as a condition of any federally regulated, supervised, or insured loan on any construction or building within the 100-year floodplain. (Refer to the Riverine Flooding section of the Michigan Hazard Analysis for additional information on the NFIP.)
3. Promote floodplain and shoreline management activities statewide. Environment, Great Lakes, and Energy (EGLE) has extensive regulatory authority over the use and alteration of floodplains in Michigan. (Refer to the Riverine Flooding section of the Michigan Hazard Analysis for additional information on these regulatory authorities.) The EGLE regularly provides information to public and private interests regarding floodplains, land and water "interface" permit requirements, and building requirements in flood hazard areas, so that informed purchase and/or development decisions can be made. The EGLE also has regulatory authority over Great Lakes shoreline areas under Part 323, Shorelands Protection and Management, of the Natural Resources and Environmental Protection Act (1994 PA 451), as amended. Part 323 gives EGLE responsibility to identify

hazardous and fragile coastal areas, establish regulations designed to minimize the impact of development on these areas, and minimize the hazard facing development.

Note: Regulatory mechanisms can include but are not necessarily limited to setbacks, zoning, and building code standards. Permits are required for construction in high-risk erosion or flood areas, or for alterations in an environmental area. If a local ordinance has been approved by EGLE, the regulation will be done at the local level. In the absence of a local ordinance, permits must be obtained from EGLE. (Refer to the Great Lakes Shoreline Flooding and Erosion section of the Michigan Hazard Analysis for additional information on these regulatory authorities.)

Department of Natural Resources (MDNR)

1. Assist in marine patrols and search and rescue operations. The MDNR has trained personnel that periodically utilize watercraft as part of their work activities. In a flooding disaster, these resources could be mobilized to provide supplemental support to local law enforcement marine patrols in clearing waterways, enforcing no-wake restrictions, and conducting damage assessments and/or search and rescue operations. (Refer to the Public Safety ESF.)

Michigan State Police (MSP) - Emergency Management Homeland Security Division (EMHSD)

1. Promote and administer federal flood mitigation programs. The MSP/EMHSD administers federal Hazard Mitigation Assistance (HMA) programs in Michigan in accordance with the provisions set forth in MSP/EMHSD Publication 007–State of Michigan Administrative Plan for the Hazard Mitigation Grant Program (HMGP), and each HMA program's respective federal implementation guidelines. The State Hazard Mitigation Officer (SHMO) from the MSP/EMHSD is primarily responsible for program implementation and grants management activities. The Michigan Citizen-Community Emergency Response Coordinating Council (MCCERCC) is responsible, under Michigan Executive Order 2007-18, for making recommendations regarding the identification, solicitation, review, prioritization, and selection of hazard mitigation projects for funding under the HMA programs. All the HMA programs except the HMGP are annual-funding programs. The HMGP is only available following a Presidential major disaster declaration. All the HMA programs can be used to mitigate long-term flood risk. (Refer to the MEMP Recovery Support Plan, MSP/EMHSD Publication 007–State of Michigan Administrative Plan for the Hazard Mitigation Grant Program, and MSP/EMHSD Publication 106–Michigan Hazard Mitigation Plan.)
2. Coordinate and administer any federal public assistance and individual assistance grant programs should the incident receive a Presidential major disaster declaration.
3. As appropriate, seek U.S. Army Corps of Engineers (USACE) flood fighting assistance. If local and state resources are not sufficient to meet the response and/or recovery needs of a flood situation, the MSP/EMHSD may seek assistance and resources from the USACE, Detroit District. The USACE assistance generally is limited to provision of supplies, equipment, and technical advice necessary to prevent imminent flood damage, provide assistance for flood fighting and rescue operations, and assist with repair and restoration of publicly owned flood control facilities. The USACE emergency assistance is intended to supplement state and local flood response efforts. The MSP/EMHSD is the lead state coordinating agency for all USACE emergency flood assistance, although technical assistance can be provided upon request of any state or local governmental authorities.

United States Army Corp of Engineers (USACE)

1. The USACE Advance Measures Program. The USACE Advance Measures Program can be activated to assist a state or local government in mitigating the potential damage and impact caused by flooding. The Advance Measures Program has a construction component under which the USACE can provide assistance with permanent construction projects designed to mitigate potential flood damages. Examples of construction projects that could potentially be funded under this component of the program include earthen levees, rock and/or sand-filled cribs, and concrete and/or steel sheet pile seawalls. Although the MSP/EMHSD does not have any direct control over the implementation of this program, it can suggest possible flood mitigation project locations and does receive periodic updates from the USACE regarding ongoing local flood mitigation projects.
2. Damage Assessment. The USACE can participate in damage assessment (under the federal Stafford Act, PL 93-288, as amended) when requested by FEMA. The USACE participation is generally limited to assisting in the PAGP. The USACE also may assist state and local officials in determining the nature, extent, and cause of a flood disaster, and in identifying potential flood fighting and flood mitigation measures and implementation strategies.
3. Ice Jams. In the event of flooding caused by ice jams, USACE involvement is generally limited to providing technical advice. However, when an ice jam poses an immediate flood threat to improved property, the USACE can supplement state and local flood fighting efforts. The USCG can provide icebreaking assistance for flood control at river mouths where adequate navigation depths are available.
4. Post-Flood Relief. The USACE may participate in post-flood relief activities to the extent allowed under federal PL 99-662. Generally, this includes:
    a. Opening up emergency access routes for emergency vehicles.

b. Emergency channel and bridge debris clearance.
c. Providing emergency supplies of clean water.
d. General, widespread debris removal following a flood when the material is certified as an immediate public health hazard.

HAZARDOUS MATERIAL INCIDENTS –TECHNOLOGICAL DISASTER

NOTE: In the 2022 update of the MEMP, the Hazardous Materials Incident annex is not being updated due the recent (December 2021) updating of Radiological Emergency Preparedness requirements from the federal government. The tasks, descriptions, and other information in this annex are directly repeated from the 2018 version of the MEMP.

Types of Hazardous Material Incidents. For purposes of this plan, hazardous material incident procedures are divided into land and inland waterway-based procedures, and Great Lakes procedures. Response procedures for shipboard fires are covered under the Great Lakes procedures.

General Response Procedures for Land Based and Inland Waterway Oil Spill or Other Hazardous Material Incidents. If an oil or other hazardous material incident occurs on the land or on an inland waterway, the owner/operator is required to notify local, state, and federal government according to applicable statutes and rules. The extent to which state government becomes involved depends on the type or scope of the incident. The EGLE, MDNR, MSP, MDARD, MDOT, MDHHS, and MDLARA have responsibilities related to oil spills or hazardous material incidents. The EGLE has primary responsibility under Part 5, General Powers and Duties, of the Natural Resources and Environmental Protection Act (1994 PA 451, as amended), for preventing and guarding against pollution to the environment. For spills occurring on land and inland waters, the U.S. Environmental Protection Agency (USEPA) is the lead federal response agency.

Incident Classification. The party responsible for the release is responsible for containment and cleanup, under the supervision of the EGLE (and in conjunction with the MDARD if pesticides are involved). Local government is responsible for initial emergency response and incident command. Local government first responders initially assess and classify the incident according to the Oil or Hazardous Material Incident Emergency Action Level Classification System (see separate table with same title). The classification level determines appropriate emergency actions to be taken. According to the Michigan Fire Prevention Act (1941 PA 207, as amended), if the chief of the local fire department finds that a dangerous condition exists, he/she may take all necessary steps to protect persons and property.

State Notification. The Michigan Fire Prevention Act requires that immediately following the occurrence of an incident, the State Fire Marshal shall be notified. Notification of some incidents must be made through the EGLE Pollution Emergency Alerting System (PEAS). Other state departments/agencies are notified through MSP Operations.

Incident Management. Local government is responsible for designating an incident commander, usually the fire chief or the highest-ranking fire official at the scene. This person directs the incident response through an Incident Command Post (ICP). If the incident escalates to a point where coordination of several local agencies is required, the local EOC may be activated. The local EMC coordinates the overall local response from the EOC. An MSP fire investigator or traffic safety representative will function as incident commander for state response. This person will work out of the ICP if minimal response is necessary.

State Department/Agency Coordination. If the response requires the coordination of several state departments/agencies, a State Command Post (SCP) may be established by the MSP/EMHSD. In the event of a substantial release causing a "community emergency" that requires the assistance of several state departments/agencies, the MSP/EMHSD will coordinate such activity, act as liaison between state and local government, and make recommendations to the Governor. Normally, the MSP/EMHSD will activate the SEOC in Lansing to coordinate state off-scene response. On-scene state response will be coordinated through the SCP (if activated) or through the state department/agency representatives at the ICP.

Emergency Measures. In accordance with the Michigan Fire Prevention Act, MSP personnel (in conjunction with the local fire department) must determine the emergency measures to be taken. Other state personnel may report to the scene to assess the incident and respond as necessary. If the incident is confined to a "site area emergency", MSP fire investigators or traffic safety representatives will serve as the focal point for record keeping, communications, and coordination of all other state departments/agencies. The MSP fire investigators or traffic safety representatives will coordinate incident command in conjunction with local government.

Industry and government hazardous material teams may be requested to provide technical advice and assistance under the "good Samaritan" provisions of the Michigan Fire Prevention Act. If the situation warrants, the local EMC may recommend that the chief executive of the local jurisdiction declare a local “state of emergency” under the Michigan Emergency Management Act, thereby activating appropriate response and recovery aspects of local government.

Technical Assistance, Monitoring and Cleanup. Appropriate EGLE staff may provide technical expertise at the scene to local first responder agencies. In certain instances, EGLE staff may provide limited assistance in controlling and cleaning up the spill, to the extent that such actions are consistent with approved divisional response plans and EGLE policy. The

EGLE will coordinate actions and remedial activities necessary to provide protection to the environment and will monitor the party responsible for the release to ensure timely and appropriate response is taken. If a responsible party cannot be identified or the identified responsible party fails to take the appropriate actions in a timely manner, the EGLE will initiate actions to contain and clean up the spill. Private contractors are generally hired to perform this service, with the EGLE supervising the activity. When state funds have been exhausted, spill containment and cleanup will be deferred to the federal government.

Federal Notification. Oil spills and other hazardous material incidents are required to be reported to the National Response Center (NRC) according to applicable federal statutes. This center receives and relays notices of releases to the appropriate pre-designated federal On-Scene Coordinator (OSC). For federally designated "inland zone" incidents, a representative from the USEPA will function as the OSC. The OSC will monitor and evaluate the response to the incident by local and state government. Generally, the federal government will not get involved in the actual incident response unless it is determined that assistance is needed or if the EGLE requests that the federal government assume responsibility for containment and cleanup due to lack of state funding. The OSC may call in contractors or request the advice and assistance of the Regional Response Team (RRT).

Regional Response Team. The federal RRT, consisting of several federal and Region V state departments/agencies, may be requested to provide advice and assistance in accordance with the provisions set forth in the Regional Contingency Plan (RCP). The RCP describes federal response to an oil spill or other hazardous material incident. A representative of the EGLE is the Michigan member of the RRT and acts as the liaison between the State of Michigan and the RRT. The OSC or the EGLE RRT representative may request activation of the RRT. The OSC may also request assistance from specialized federal Strike Teams to provide expertise, equipment, and "hands on" response.

General Response Procedures for a Great Lakes Oil Spill or Other Hazardous Material Incident. In the event of an oil spill or other hazardous material incident on the Great Lakes, there are various reporting requirements to notify local, state, and federal government.

State Notification. The U.S. Coast Guard (USCG) has primary responsibility for responding to a spill on the Great Lakes and on connecting waterways and adjacent shorelines (federally-designated "coastal zone"). The EGLE and local government also have responsibility for response to a spill that could affect the Michigan environment. Upon notification of the occurrence of a spill, an EGLE district representative will immediately assess the incident and recommend appropriate action. The party responsible for the spill has ultimate responsibility for containment and cleanup action. However, if the responsible party cannot be identified in a short period of time or fails to take action, government will respond immediately.

Incident Classification. Spills on the Great Lakes are classified as "minor discharge", "medium discharge", and "major discharge" as indicated in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). These levels are incorporated in the Michigan Oil Spill or Other Hazardous Material Incident Emergency Action Level Classification System (see separate table with same title). The classification level determines appropriate actions to be taken.

Emergency Measures. For small and medium spills, state, and local government may provide response assistance as capabilities exist. This may include deploying existing containment equipment under the control of state or local government or enlisting the services of private contractors. The EGLE has authority to employ spill containment contractors. Local government may work directly with the EGLE in responding to the incident. The EGLE will determine the emergency measures to be taken. Other state personnel may report to the scene to assess the incident and respond as necessary. Local government may take all necessary steps to protect persons and property as authorized under the Michigan Fire Prevention Act.

Incident Management. If a large oil spill occurs on the Great Lakes, connecting waterways or adjacent shorelines, the Captain of the nearest USCG Port (COTP) will coordinate containment and cleanup activities. The COTP is the federal On-Scene Coordinator (OSC). The OSC will coordinate the federal response and may request advice and assistance of the federal RRT.

State Department/Agency Coordination. The MSP/EMHSD will function as the focal point for record keeping, communications, and coordination with all other state departments/agencies while working jointly with the USCG. If the on-scene response requires the coordination of several state departments/agencies, the MSP/EMHSD may establish an SCP. Normally, the MSP/EMHSD will also activate the SEOC in Lansing to coordinate state agency off-scene response.

Technical Advice and Assistance. The EGLE will provide technical advice and assistance to both the Governor (through the MSP/EMHSD) and to the federal government through membership on the RRT. Private industry may be requested to provide technical advice and assistance under the "good Samaritan" provisions of the Michigan Fire Prevention Act.

Regional Response Team. If the RRT is activated, the OSC will chair the RRT and determine how and where it will convene. The RRT, consisting of several federal and Region V state departments/agencies, may be requested to provide advice and assistance in accordance with the provisions set forth in the Regional Contingency Plan (RCP). The RCP describes federal response to an oil spill or other hazardous material incident. A representative of the EGLE is the Michigan member of the RRT and acts as the liaison between the State of Michigan and the RRT. The OSC or the EGLE RRT representative may request activation of the RRT. The OSC may also request assistance from specialized federal Strike Teams to provide expertise, equipment and "hands on" response.

General Response Procedures for Shipboard Fires. Response to a shipboard fire follows the overall procedures stated above in the "General Response Procedures for a Great Lakes Oil Spill or Other Hazardous Material Incident" section. However, hazard specific procedures must be developed by local government to protect responders if the fire jurisdiction decides to respond to a shipboard fire. The ultimate responsibility for a vessel is with the ship's master. Due to the unique hazards presented by a shipboard fire, the local fire jurisdiction may decide not to initiate onboard firefighting. If a fire jurisdiction decides to actively engage in shipboard firefighting, then the jurisdiction must:

- Develop standard operating procedures that are consistent with MIOSHA standards–including Part 74 Fire Fighting Safety Standards, Michigan Hazardous Waste Operations and Emergency Response (HAZWOPER), Confined Space Entry requirements–and follow the recommendations established in National Fire Protection Association (NFPA) 1405.
- Establish and administer a training program consistent with the regulations stated above.

Oil Spill or Other Hazardous Material Incident Emergency Action Level Classification System

Classification	Initiating Condition	State Actions	Primary Agency
MINOR INCIDENT	**Transportation Incident:** • An oil or hazardous material transport vehicle has been involved in an accident/incident; however, no discharge/release of oil or hazardous materials has occurred. • Structural integrity of shipping containers has not been jeopardized. • Product transfer is not necessary before transport vehicle can be moved. • Traffic does not need to be rerouted. **Fixed Site Incident:** • An incident involving an oil or hazardous material has occurred. No discharge/release or potential for release exists. • No outside assistance is required.	No emergency notification of offsite authorities required.	N/A
WARNING/ALERT	**Transportation Incident:** • An oil or hazardous material transport vehicle has been involved in an accident/incident. Potential for a discharge/release exists. • Structural integrity of shipping containers has been jeopardized. • Product transfer is necessary before transport vehicle can be moved. • Traffic is, or must be, rerouted. • Potential exists for protective actions (evacuation/in-place shelter) in the immediate area. **Fixed Site Incident:** • An incident involving an oil or hazardous material has occurred. The potential for a discharge/release at the site exists. • Outside assistance may be required. • Potential exists for protective actions (evacuation/in-place shelter) of facility personnel.	Upon receiving notification of the incident from the local fire or police authority, owner/operator, or other notifying source: 1. Notify appropriate departmental contacts. 2. Depending on the type of incident, the state agencies with jurisdiction or regulatory interest shall assess the incident with regard to their agency interests.	1. MSP (Post/District/Operations) and EGLE 2. MSP (fire investigator or traffic safety representative), MSP/EMHSD, EGLE, MDARD
Classification	**Initiating Condition**	**State Actions**	**Primary Agency**
SITE AREA EMERGENCY <u>Federal Equivalents</u>*	**Transportation Incident:** • An oil or hazardous material vehicle has been involved in an accident/incident. A discharge/release of oil or hazardous materials has occurred.	1. Establish incident command in conjunction with local government. 2. Agency representatives shall report to the Incident Command Post to perform	1. MSP (fire investigator or traffic safety representative), MSP/EMHSD, EGLE, MDARD 2. MSP (fire investigator or traffic safety representative),

Oil: "minor discharge"; Hazardous Materials: "minor or medium release" (*federal classification criteria found on page following this table)	• Evacuation/in-place sheltering of the immediate area surrounding the scene is necessary. **Fixed Site Incident:** • An incident involving a discharge/release of oil or hazardous materials has occurred and evacuation/in-place sheltering of facility personnel is necessary. • Although the incident appears to be contained within the facility, potential exists for an offsite release. • Outside assistance may be necessary.	assessment and provide assistance as appropriate for their authorities. 3. State staff shall perform monitoring and sampling as capabilities allow. 4. State authorities shall verify that the appropriate federal agencies are aware of the incident and advise accordingly. 5. Notification of other states and/or Canadian authorities may be necessary for discharges/releases with trans-border potential.	MSP/EMHSD, EGLE, MDARD 3. EGLE, MDARD 4. MSP/EMHSD, EGLE, MDARD 5. MSP Operations
COMMUNITY EMERGENCY **<u>Federal Equivalents</u>*** Oil: "medium or large discharge"; Hazardous Materials: "medium or major release" (*federal classification criteria found on page following this table)	**Transportation Incident:** • An oil or hazardous material transport vehicle has been involved in an accident/incident. A substantial discharge/release of oil or hazardous materials has occurred which may affect a large population and/or geographic area. • Evacuation/in-place sheltering of the vulnerable zone around the scene of the incident is necessary. **Fixed Site Incident:** • An incident involving a substantial discharge/release of oil and/or hazardous materials has occurred with significant potential impact on a large population and/or geographic area. Evacuation/in-place sheltering of the immediate area surrounding the facility is necessary.	1. If the incident warrants this classification at the onset, consider all actions listed under the previous "Site Area Emergency" level, of not already accomplished. 2. If necessary, establish a State Command Post (SCP) to coordinate state response and provide technical assistance. 3. Agency specialists are to report to the Incident Command Post (or SCP, if established) to provide technical expertise to incident command. 4. If the discharge/release has trans-border impact or potential, ensure that other states and/or Canadian authorities have been notified, and establish lines of communication for information sharing and response coordination. 5. State staff shall jointly collect information on the incident and present recommendations to the MSP/EMHSD for coordination of activity. 6. Identify vulnerable municipal and private water intakes that may be impacted by the discharge/release and notify accordingly. 7. Activate the SEOC if conditions are severe enough to warrant activation. 8. Ensure that appropriate actions have been taken by local government with regard to implementation of protective actions, activation of the Emergency Alert System, establishment of evacuation routes, access control points, shelters, etc. 9. The pre-designated state representative to the RRT shall act as technical liaison between the state assessment staff and federal agencies performing technical analysis. 10. Coordinate response with local, state, and federal responders. Ensure communications are maintained between responding entities, and that all information is shared between agencies. 11. Prepare Governor's emergency/disaster declaration request, if necessary. 12. Provide accurate, ongoing information to the media. As conditions warrant, activate the JIC/Rumor Control Center and provide periodic updates from the SEOC. 13. Compile damage assessment information.	1. All involved agencies 2. MSP/EMHSD 3. MSP (fire investigator or traffic safety representative), MSP/EMHSD, EGLE, MDARD 4. MSP Operations 5. MSP (fire investigator or traffic safety representative), EGLE, MDARD 6. EGLE 7. MSP/EMHSD 8. MSP/EMHSD 9. EGLE 10. All involved agencies 11. MSP/EMHSD 12. MSP/EMHSD and involved agencies 13. MSP/EMHSD
Classification	**Initiating Condition**	**State Actions**	**Primary Agency**
RECOVERY / REENTRY	The incident has occurred and immediate life, safety, and/or environmental protection measures have been taken. Conditions that initiated protective actions have been mitigated. Long-term measures must now be taken to return	1. Perform onsite surveys, monitoring, and provide for sampling for contamination of soils, surface waters and groundwater.	1. EGLE 2. MDHHS

	the environment and/or situation to pre-incident conditions.	2. Perform onsite surveys, monitoring and provide for sampling for contamination of homes and structures. 3. Coordinate cleanup of oil and other hazardous materials, contaminated soils, surface waters, groundwater, other items. 4. Provide assistance in identifying approved waste disposal facilities and oversee timely and proper disposal of waste material. 5. Determine when the area is safe for reentry by the general public.	3. EGLE 4. EGLE 5. EGLE and MSP (fire investigator or traffic safety representative)

***Federal Classification Criteria.** The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) classifies spills according to size. This classification is provided as guidance for action. It is not meant to imply associated degrees of hazard to public health or welfare, or as a measure of environmental injury. Any discharge or release that poses a substantial threat to public health and welfare, or the environment, or results in significant public concern, shall be classified as a major discharge regardless of the quantitative measure.

Oil:

- Minor discharge–less than 1,000 gallons of oil to waters of the Great Lakes and specified ports and harbors.
- Medium discharge–1,000 to 10,000 gallons of oil to waters of the Great Lakes and specified ports and harbors.
- Major discharge–more than 10,000 gallons of oil to waters of the Great Lakes and specified ports and harbors.

Hazardous Materials:

- Minor release–a quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses minimal threat to public health, welfare, or the environment.
- Medium release–a release not meeting the criteria for classification as a minor or major release.
- Major release–a release of any quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses a substantial threat to public health and welfare, or the environment, or results in significant public concern.

Oil Spill or Other Hazardous Material Incident Notification Requirements. State and federal law dictate hazardous material incident notification requirements. The Superfund Amendment and Reauthorization Act (SARA)/Title III; the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); and the Michigan Fire Prevention Act address initial emergency notification. In the event of a hazardous material incident, the owner/operator must immediately notify: 1) the local fire department; 2) the community emergency coordinator for the Local Emergency Planning Committee (LEPC); 3) the State Fire Marshal (in the MDLARA); 4) the State Emergency Response Commission (SERC)–abolished by Michigan Executive Order 2007-18 on May 2, 2007, and replaced by the Michigan Citizen-Community Emergency Response Coordinating Council (MCCERCC); and 5) the National Response Center (NRC). Upon notification, local government must immediately contact key officials and other local emergency responders (as necessary), notify the State Fire Marshal, and take necessary actions to advise the affected population of appropriate protective actions. State department/agency notification assignments are as listed below.

MICHIGAN STATE POLICE (MSP) POST NEAREST TO THE INCIDENT SCENE:

- Notify the MSP District to advise MSP fire investigator or traffic safety district representative (as appropriate) regarding the type of incident.
- Notify MSP Operations.

MICHIGAN STATE POLICE (MSP) DISTRICT:

- Notify MSP fire investigator (if a fixed site or rail transportation incident) or traffic safety district staff (if a transportation incident).
- Notify the MSP/EMHSD District Coordinator if unable to contact MSP fire investigator or traffic safety representative.
- Confirm MSP Operations notification via the MSP Post and advise MSP Operations that appropriate MSP fire investigator or traffic safety representative has been notified.
- If the incident progresses, consider notifying the MSP/EMHSD District Coordinator and other state department/agency district personnel to respond as advised by MSP fire investigator or traffic safety representative.

MICHIGAN STATE POLICE (MSP) OPERATIONS:

- Notify the pre-designated contact for the EGLE.
- Notify the MSP/EMHSD duty officer.
- Notify other state departments/agencies as appropriate for the incident (including the State Fire Marshal in the MDLARA), as instructed by MSP personnel assessing the incident.
- Notify the Province of Ontario, Canada, and other states for incidents with transborder potential.

- Confirm that the MSP District has been notified and that the State Fire Marshal (in the MDLARA) and appropriate MSP fire investigator or traffic safety representative has been contacted.

MICHIGAN DEPARTMENT OF ENVIRONMENT GREAT LAKES ENERGY (EGLE)/ POLLUTION EMERGENCY ALERTING SYSTEM (PEAS):

- Immediately contact MSP Operations of a hazardous material incident that requires emergency response actions of local responders.

OTHER STATE DEPARTMENTS/AGENCIES:

- Each pre-designated contact person is responsible for notifying appropriate division/district representatives.
- Each division/district contact person is responsible for assessing the situation and responding, if necessary.
- Each division/district contact person is responsible for advising his/her headquarters personnel of the status of the agency response.

Figure 20 Scenario for Oil Spill or Other Hazardous Material Incident Response

(1. Classified as "Minor Incident")

OIL OR OTHER HAZARDOUS MATERIAL INCIDENT OCCURS

- Transportation Incident or Fixed Site Incident classified as "Minor Incident".

▼

OWNER / OPERATOR

- Responds to incident.
- No discharge / release.
- No state assistance is required.

▼

INCIDENT ABATED

(2. Classified as "Warning/Alert")

OIL OR OTHER HAZARDOUS MATERIAL INCIDENT OCCURS

- Transportation Incident or Fixed Site Incident classified as "Warning/Alert".

▼

OWNER / OPERATOR

- Responds to incident.
- Initially classifies incident.
- Notifies authorities (National Response Center and appropriate local and state departments/agencies).

▼

NATIONAL RESPONSE CENTER

- Notifies federal On-Scene Coordinator.

▼

LOCAL ORGANIZED FIRE DEPARTMENT AND MSP

- Performs initial incident assessment.
- Confirms incident classification.
- Notifies local EMC and appropriate local and state departments/agencies.

▼

INCIDENT ABATED

(3. Classified as "Site Area Emergency")

OIL OR OTHER HAZARDOUS MATERIAL INCIDENT OCCURS

- Transportation Incident or Fixed Site Incident classified as "Site Area Emergency".

▼

OWNER/OPERATOR

- Responds to incident.
- Initially classifies incident.
- Notifies authorities (National Response Center and appropriate local and state departments/agencies).

▼

NATIONAL RESPONSE CENTER

- Notifies federal On-Scene Coordinator.

▼

LOCAL ORGANIZED FIRE DEPARTMENT AND MSP

- Performs initial incident assessment.
- Confirms incident classification.
- Notifies local EMC and other local and state departments / agencies.
- Establishes Incident Command to coordinate on-scene response and determine the need for protective actions.
- Establishes ICP; depending on circumstances, SCP may also be established.
- Recommends that Local and State EOCs be activated to coordinate off-scene response and implement protective actions.
- Provides technical assistance, including monitoring and sampling, as capabilities allow.
- Notifies the Province of Ontario, Canada, and adjacent states for incidents with transborder potential.

▼

INCIDENT ABATED (Reentry/recovery begins)

Scenario for Oil Spill or Other Hazardous Material Incident Response (cont.)
(Approximate sequence of events)

(4. Classified as "Community Emergency")

OIL OR OTHER HAZARDOUS MATERIAL INCIDENT OCCURS

- Transportation Incident or Fixed Site Incident classified as "Community Emergency".

▼

OWNER/OPERATOR

- Responds to incident.
- Initially classifies incident.
- Notifies authorities (National Response Center and appropriate local and state departments/agencies).

▼

NATIONAL RESPONSE CENTER

- Notifies federal On-Scene Coordinator.

▼

FEDERAL ON-SCENE COORDINATOR

- Activates Regional Response Team. (State representative to RRT acts as technical liaison between state assessment staff and federal agencies performing technical analysis.)
- Activates other federal resources as required.
- Links with Incident Command (once established).

▼

LOCAL ORGANIZED FIRE DEPARTMENT AND MSP

- Performs initial incident assessment.
- Confirms incident classification.
- Notifies local EMC and appropriate local and state departments/agencies.
- Establishes Incident Command to coordinate on-scene response and determine the need for protective actions.
- Establishes ICP; depending on circumstances, SCP may also be established.
- Recommends that Local and State EOCs be activated to coordinate off-scene response and implement protective actions.
- Provides technical assistance, including monitoring and sampling, as capabilities allow.
- Notifies the Province of Ontario, Canada, and adjacent states for incidents with transborder potential.

▼

LOCAL CHIEF EXECUTIVE

- Declares a local "state of emergency" under 1976 PA 390, as amended.
- If appropriate, requests a state emergency or disaster declaration by the Governor.

▼

GOVERNOR

- May declare disaster or emergency under 1976 PA 390 and authorize state supplemental assistance.
- May activate MEMAC/EMAC if appropriate.

- May request federal disaster relief assistance, if warranted, through FEMA Region V in Chicago, Illinois.

▼

FEMA REGION V

- Assesses situation with MSP/EMHSD, local and state departments/agencies (on-scene or via telephone).
- Activates / coordinates federal relief assistance, if authorized by the President.

▼

INCIDENT ABATED

- Affected local jurisdiction coordinates reentry into evacuated area, if applicable, and local recovery efforts.
- Affected local jurisdiction may seek public cost recovery through 1976 PA 390/Section 19 (if federal disaster relief assistance was not activated).
- The EGLE coordinates monitoring, sampling, and cleanup activities.

Assessment of Oil Spills or Other Hazardous Material Incidents

Initial Assessment. If an oil spill or other hazardous material incident occurs, the owner/operator is required to notify local, state, and federal government according to applicable statutes and rules. Local government first response agencies initially assess and classify the incident according to the Oil Spill or Hazardous Material Incident Emergency Action Level Classification System (see separate table with same title). This initial assessment information is reported to the appropriate agencies using the Hazardous Chemicals, Flammables, Toxic Materials Accident/Spill Report (LEIN code: ACCCHEMICAL – see form below). This satisfies the notification requirements prescribed in the Michigan Fire Prevention Act, which requires that the State Fire Marshal be notified if an incident occurs. Notification of some incidents must also be made through the EGLE/PEAS and the National Response Center.

Figure 21 Hazardous Material Incident Notification Message Form

(Place an X in appropriate boxes and enter available information)

LINE 1 - DATE:_____ REPORTING TIME:____HRS.
LINE 2 - REPORTED BY:_____ TELEPHONE:____
LINE 3 - TIME OF INCIDENT:___HRS. INITIAL REPORT___ FOLLOW-UP___
LINE 4 - INCIDENT DESCRIPTION:_____
LINE 5 - _____
LINE 6 - TRANSPORTATION___ FIXED SITE__
LINE 7 - FACILITY OR CARRIER INVOLVED:_____
LINE 8 - FACILITY/CARRIER CONTACT:_____
LINE 9 - ADDRESS OF INCIDENT:_____
LINE 10 - CITY OR TOWNSHIP:_____
LINE 11 - SPILL_ LEAK_ FIRE_ EXPLOSION__ OTHER:___
LINE 12 - RELEASED INTO: AIR_ WATER__ GROUND__
LINE 13 - CLASS: MINOR___ ALERT___ SITE AREA EMERGENCY___ COMMUNITY EMERGENCY___
LINE 14 - INCIDENT STATUS: ESCALATING__ STABLE__ DE-ESCALATING___
TERMINATED__
LINE 15 - PROTECTIVE ACTION RECOMMENDATION: IN-PLACE SHELTER__ EVACUATION_ NONE__
LINE 16 - PROTECTIVE ACTION STATUS: IN-PLACE SHELTER_ EVACUATION_ NONE__
LINE 17 - NUMBER OF INJURIES:___ NUMBER OF DEATHS:___
LINE 18 - MATERIAL NAME:_____
LINE 19 - LIQUID___ GAS___ SOLID___
LINE 20 - EXTREMELY HAZARDOUS SUBSTANCE: YES__ NO_ UNKNOWN_
LINE 21 - AMOUNT OF MATERIAL RELEASED:_____
LINE 22 - DURATION OF RELEASE:_____
LINE 23 - TOTAL AMOUNT THAT COULD BE RELEASED:_____
LINE 24 - OTHER CHEMICALS OR INCOMPATIBLES INVOLVED:_____
LINE 25 - HEALTH RISKS AND PRECAUTIONS:_____
LINE 26 - _____
LINE 27 - EMERGENCY MEDICAL TREATMENT RECOMMENDED:_____
LINE 28 - _____
LINE 29 - WIND DIRECTION (FROM):____(i.e., N, NW) WIND SPEED:__MPH
LINE 30 - AIR TEMP (F):_ CLEAR___ PTLY CLOUDY___ OVERCAST_
LINE 31 - AREA OF RELEASE: RURAL__ RESIDENTIAL__ COMMERCIAL___
LINE 32 - INDUSTRIAL__ OPEN WATER___
LINE 33 - RELEASE IMPACT – NUMBER OF PERSONS AFFECTED:_____
LINE 34 - SPECIAL POPULATIONS OF CONCERN: SCHOOLS__ REST HOMES_ HOSPITALS_
LINE 35 - SHOPPING CENTERS_ JAILS__ OTHERS:__
LINE 36 - RESPONSE STATUS (LIST JURISDICTIONS RESPONDING: PD, FD, HAZMAT TEAM, ETC.):_____
LINE 37 - _____
LINE 38 - INVESTIGATING AGENCY:_____ TELEPHONE:_____
AGENCIES NOTIFIED:
LINE 39 - LOCAL FIRE DEPARTMENT / POLICE DEPARTMENT___ FACILITY OR CARRIER___
LINE 40 - LOCAL EMERGENCY MANAGEMENT COORDINATOR__ LOCAL HEALTH DEPARTMENT_
LINE 41 - MICHIGAN STATE POLICE DISTRICT FMD / MCD____ MDNR PEAS HOTLINE__
LINE 42 - NATIONAL RESPONSE CENTER__ OTHER:_____

Incident Report. If the incident is classified as a "community emergency" or has the potential to escalate to that level, the affected MSP Post (pursuant to Official Order No. 3) and local emergency management program must submit information to the MSP/EMHSD and MSP Operations (via the MI CIMS) which describes the nature and extent of the incident and allows for rapid activation of state resources should the need arise. (Refer to the Information and Planning ESF and MSP/EMHSD Publication 901 – Michigan Damage Assessment Handbook.)

Detailed Assessment. Michigan State Police (MSP) personnel (i.e., fire investigator, traffic safety representative, MSP/EMHSD District Coordinator), in conjunction with the local fire department (and other local and state departments/agencies, as applicable), will conduct a more detailed assessment of the incident upon reporting to the scene. As necessary, the EGLE and/or local health department will initiate direct monitoring and sampling. Assessment information collected at the scene will be compiled at the SCP, if established, or ICP, and then communicated to the SEOC Planning Section.

Information Collection, Compilation, Synthesis and Analysis. The SEOC Planning Section will focus on conducting a thorough analysis of the technical aspects of the incident, as well as the impacts to the affected community and population. The Planning Section will collect, compile, synthesize, and analyze incident and impact information and provide recommendations regarding appropriate actions to take. The SEOC Planning Section Chief coordinates overall SEOC assessment activities. Technical experts from the EGLE, MDARD, MDHHS, and other departments/agencies may be mobilized as necessary to provide technical assistance and support in analyzing information, coordinating contamination control activities, and making protective action recommendations. (Refer to the Information and Planning ESF.)

ON-SCENE STATE RESPONSE AGENCIES:

- Collect assessment information from first responders and the owner/operator.
- Identify the material being released.
- Collect air, water, and soil samples (and other media as appropriate) and conduct tests to determine offsite effects. (Various EGLE environmental response divisions.)
- Relay field assessment information and recommendations to the SEOC.

State Emergency Operations Center (SEOC) PLANNING SECTION:

- **Coordinate technical analysis and contamination control activities:**
  - Request technical experts from EGLE, MDARD, MDHHS, and other departments/agencies to provide technical assistance and expertise.
  - Collect, compile, and synthesize field assessment information submitted by on-scene response agencies.
  - Analyze field assessment information
    - Perform air, water, or ground dispersion modeling to predict down range concentrations.
    - Provide information on chemical characteristics and recommended first responder and population protective actions.
    - Provide information on toxicological properties and toxic health effects.
    - Provide information on short- and long-term environmental impact.
  - Plot technical information on maps and display boards in the SEOC.
- **Coordinate the collection, compilation, and display of incident related information:**
  - Display information visually for the SEOC staff to use in responding to the incident
    - Area affected.
    - Material characteristics.
    - Deaths and injuries.
    - Property damage.
    - Resources expended/committed.
    - Extent of contamination.
    - Evacuation routes/status (as appropriate).
    - Reception centers/shelters open (as appropriate).
    - Access control points.
    - Other information as appropriate.
- **Maintain a situation log to record major events and activities as they occur.**

INSECT INFESTATION – NATURAL DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures during an insect infestation disaster.

Description of Insect Infestations
Widespread insect infestations can damage or destroy agricultural crops, trees, or other types of vegetation to such an extent that large-scale debris management operations (of a regional or statewide nature) may be required to properly collect, sort, store, and dispose of the vegetative material. An infestation could manifest from a native species, but invasive species are more likely to produce an unexpected infestation as they disrupt the natural biosphere and historical balances.

Notification
The MSP/EMHSD notification of a significant insect infestation will most likely come from the MDARD, which will obtain the information from MDARD inspectors, the USDA, MSU Extension, and other federal and state agricultural agencies, and farmers/agricultural enterprises over a period of several weeks to possibly several months.

Assessment
Assessment of an insect infestation will likely take place over a period of several weeks to possibly several months – depending on the insect and vegetative material involved, the time of year, the size of the infestation, and a number of other factors. The assessment will focus primarily on determining the: 1) location, nature, scope, and magnitude of the infestation; 2) amount of environmental/agricultural damage incurred; 3) impacts (actual/potential/anticipated) to critical facilities and services and the economy; and 4) anticipated resource needs of the response/recovery operation–with emphasis on debris management requirements.

The primary means of transmitting local and state assessment information to the SEOC is the MI CIMS. The primary means of transmitting agricultural damage assessment information are the USDA "Flash Situation Report" and "Damage Assessment Report", both of which are prepared by County Agricultural Emergency Boards and forwarded to the USDA State (of Michigan) Emergency Board in East Lansing for verification, summarization, concurrence, and distribution. The MDARD forwards the USDA agricultural damage assessment information to the SEOC. The SEOC Planning Section and others in ESF 5 will collect, compile, synthesize and analyze the incoming assessment information.

Disaster-Specific Tasks: State Government
Michigan Department of Agriculture and Rural Development (MDARD)

1. Provide technical assistance to prevent and mitigate vegetative damage. Depending on the type of vegetative material involved, the MDARD will (in conjunction with the USDA, MSU Extension, and other agencies) take appropriate regulatory actions and provide technical advice and assistance to farmers and agricultural enterprises, as well as non-farm property owners, to prevent and mitigate the potential for severe vegetative damage from the infestation and to stop its spread. Possible techniques include but are not limited to:
    a. Quarantine of affected vegetation within the impacted areas.
    b. Providing appropriate sanitation and disposal options.
    c. Using chemical and/or biological treatments to eradicate or control the insects.
    d. Instituting an aggressive and comprehensive public education campaign.
    e. Encouraging vegetative diversity in new plantings.
    f. Practicing sound tree/plant care techniques.
    g. Any effective combination of these techniques.
2. Coordinate agricultural crop debris disposal and management operations. The MDARD will normally coordinate debris disposal and management operations that involve agricultural crops (field crops, nursery stock, fruit trees, etc.), working in conjunction with the affected farmers and agricultural enterprises, the USDA, MSU Extension and other agricultural agencies. Debris disposal and management operations that involve very large quantities of vegetation or more than one type of vegetation, or that require interaction and coordination with multiple agencies and levels of government, may be handled in conjunction with the MSP/EMHSD.
3. Coordinate plant pest and plant host treatment and eradication in non-farm areas. The MDARD may use its regulatory authority to issue quarantines and destruction orders for invasive and destructive insects in non-farm (urban and residential) areas. This may require significant interaction with local units of government as well as an extensive public information campaign.
4. Provide current information on infestation-damaged farms and agricultural attractions in Michigan. The MDARD, working in conjunction with the Michigan Travel and Tourism Office (part of the MEDC), will provide potential tourists with up-to-date information on "U-pick" farms, wineries, nurseries, orchards, and other agriculture attractions that have been severely affected by infestation. (Refer to the Information and Planning ESF.)

Department of Natural Resources (MDNR)

1. Provide technical assistance to prevent and mitigate tree damage. If the infestation primarily involves or affects trees in forested lands, the MDNR will (in conjunction with the USDA/Forest Service, MSU Extension, and other agencies) provide technical advice and assistance to landowners and forestry enterprises to prevent and mitigate the potential for severe tree damage from the infestation and to stop its spread. Possible techniques include but are not limited to:
    a. Quarantine of affected trees and tree products within the impacted areas.
    b. Providing appropriate sanitation and disposal options.
    c. Using chemical and/or biological treatments to eradicate or control the disease.
    d. Instituting an aggressive and comprehensive public education campaign.
    e. Encouraging diversity in new tree plantings.
    f. Practicing sound tree care techniques.
    g. Any effective combination of these techniques.
2. Coordinate forest land tree debris disposal and management operations. The MDNR will normally coordinate debris disposal and management operations that involve infested trees in state forest lands and adjacent lands, working in conjunction with the affected landowners, the USDA/Forest Service, MSU Extension and other agencies. Debris disposal and management operations that involve very large quantities of trees or more than one type of vegetation, or that require interaction and coordination with multiple agencies and levels of government, may be handled in conjunction with the MSP/EMHSD.
3. Provide current information on infestation-damaged forest lands in Michigan. The MDNR, working in conjunction with the Michigan Travel and Tourism Office (part of the MEDC), will provide potential tourists with up-to-date information on state parks and recreation areas, forest lands, and campgrounds that have been severely affected by infestation.

LARGE FIRES – TECHNOLOGIC DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures in a large fire disaster.

Description of Large Fire Disaster
Structure or house fires are some of the most common daily disruptions in local jurisdictions around the United States; often impacting single family dwellings and displacing families. While most of these fires are able to be handled by local resources, some fires are either too large or require too specialized a response for local jurisdictions to handle, and thus become state-level disasters.

Types of Large Fire Disaster
Large fires may include wildfires, scrap tire fires, and structure fires. Large wildfires are most likely to require state assistance and occur often in Michigan. The state may provide fire management and suppression support, additional support activities for firefighting, and liaison with federal agencies involved in wildfire suppression and management. Major fires at scrap tire storage, disposal, or recycling centers may happen in Michigan, and usually require state assistance for environmental monitoring, sampling, and investigation. Most structural fires in Michigan involve a single structure and do not require state-level assistance, however some structural fires may include multiple structures, or impact a highly populated area or facility such as a college or a shopping mall. These larger structural fires may require state level assistance and a disaster or emergency declaration to assist with response, recovery, and investigation activities. Fires involving hazardous materials, or their facilities, are addressed in the Hazardous Materials Disaster-specific Annex.

Scope
Structure fires and tire fires in the state of Michigan both fall under the scope of the State's response when local capabilities are exceeded, however additional federal or specialist partners may be required to assist due to the nature or location of the fire. Wildfires which occur within the borders of Michigan may be under the jurisdiction of the United States Department of Agriculture (USDA): National Forrest Services (NFS) rather than the State of Michigan, though the state will assist in response needs. Wildfires occurring on National Park or Forrest grounds are under the jurisdiction of the NFS or other related agencies, which may request the State to assist in fire response, containment, investigation, and recovery.

Notification
The MSP/EMHSD will be notified of a wildfire requiring SEOC activation by the local impacted jurisdiction reaching out to the MSP/EMHSD District Coordinator or MSP Operations, MDNR, or a federal agency such as the NFS or FEMA. Notification may be via MI CIMS, phone call, text, email, fax, or other appropriate method of communication.

General Response
Wildfires
The MDNR directs and coordinates grass, brush, and wildfire containment and suppression activities pursuant to Natural Resources and Environmental Protection Act 451 of 1994; Part 515 (see following page).

Generally, suppression of wildfires is a cooperative effort between MDNR fire forces and the local organized fire department(s). MDNR district/regional firefighting resources are utilized to the maximum extent possible to suppress the fire. Local resources support MDNR and other state government resources to the extent necessary. At the outset of a significant fire, typically greater than 100 acres, the local EMC or MDNR EMC may advise the MSP/EMHSD of the situation. An incident commander (IC) from within the MDNR will be designated to direct all fire suppression activities at the scene.

The MSP/EMHSD will be notified, and a meeting will be held with, designated representatives from the MSP/EMHSD, MDNR, MSP (fire investigators)–as needed, and the MDMVA, to assess the situation. These departments comprise the Unified Command, which manages the off-scene response to the fire. The MDNR is in charge of firefighting and other on-scene tasks. The MSP is responsible for investigating the cause of the fire and any deaths that may have occurred as a result of the fire. The MDMVA is normally placed on standby to mobilize if requested by the MDNR and so ordered by the Governor. The MSP/EMHSD coordinates the actions of the involved departments, determines population protection measures (i.e., evacuation or in-place sheltering) in concert with the involved departments, obtains FEMA funding, and keeps the Governor informed of the situation.

The MSP/EMHSD District Coordinator, in conjunction with MDNR personnel and the local EMC, will assess the situation to determine if population protection measures are required.

The local EOC may be activated to coordinate response activities. The SEOC may be partially activated to monitor the situation and coordinate state response activities.

Figure 22: Scenario for a Large Wildfire Response

WILDFIRE OCCURS

- Fire is large (100 acres or more), escalating, and expected to last more than one day.

▼

LOCAL ORGANIZED FIRE DEPARTMENT

- Initially responds to incident.
- Requests mutual aid from MDNR and surrounding fire departments if fire is beyond local capabilities to control and suppress.

▼

MDNR FOREST MANAGEMENT DIVISION

- MDNR Incident Management Team responds.
- Designates IC to determine extent of incident and resource requirements.
- IC supervises/directs on-scene fire suppression activities.

▼

MSP/EMHSD

- Notifies/directs District Coordinator to report to scene to assess situation and monitor/coordinate response actions.
- May partially activate SEOC to monitor situation.

▼

GOVERNOR

- May declare disaster or emergency under 1976 PA 390.
- Requests activation (through the MSP/EMHSD) of Fire Suppression Agreement, if conditions warrant.

▼

WILDFIRE SUPPRESSED

- MDNR completes investigation of fire cause and assessment of damages/impacts; supervises rehab.
- Affected local jurisdictions coordinate local recovery efforts.
- Affected local jurisdictions may seek public cost recovery through 1976 PA 390/Section 19.
- MSP/EMHSD coordinates grant management in conjunction with MDNR.

Scrap Tire Fires

Suppression of scrap tire fires is generally handled by the local organized fire department, with assistance from nearby fire departments through mutual aid. Scrap tire fires are highly problematic and differ from conventional structural fires in several respects:

- Even relatively small scrap tire fires can require significant resources to control and extinguish.
- The costs of fire management are often far beyond that which local government can absorb.
- The environmental consequences of a major tire fire are significant.
- The extreme heat converts a standard passenger vehicle tire into about two gallons of oily residue, which can leach into the soil or migrate to streams.

Other than MDNR wildfire suppression teams and limited MDMVA fire fighting forces, the State does not have any fire fighting forces that can assist in suppressing a scrap tire fire. However, the State does have significant responsibilities related to environmental monitoring and sampling, health assessments, fire investigation, and provision of technical assistance to responding firefighters. The State's primary technical expertise is found in the EGLE Scrap Tire Management Program, which regulates the transportation, storage, and disposal of scrap tires under Part 169 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. (This includes an annual registration process required for scrap tire transporters and collection sites, which can aid in determining scrap tire quantities.) In addition, state assistance may also be required for road closures and detouring, and possibly for some human service support functions (e.g., short-term sheltering, notifying/assisting homebound elderly residents).

Structural Fires

Most structural fires are handled by local fire departments with assistance (as necessary) from nearby fire departments via mutual aid. In some cases, MDNR wildfire suppression teams may assist in structural fire suppression as part of the local mutual aid structure. However, in general, state resources for structural fire suppression are very limited. The exception might be for large conflagration fires or fires at a major populated facility such as a school, college dormitory,

shopping mall, or similar type facility. In those cases, MDNR and possibly MDMVA fire forces may be utilized, but only if local capabilities (including mutual aid) are clearly overwhelmed and public health and safety is endangered.

Disaster-Specific Tasks: State Government

Department of Military and Veteran Affairs (DMVA)

1. Provide personnel, equipment, supplies, and technical assistance to aide fire suppression and recovery efforts as part of the Unified Command in fire response. (Response)

Department of Natural Resources (MDNR)

1. Conditions of extreme fire hazard exist, the MDNR will request the Governor to issue a proclamation to restrict outdoor burning to mitigate the potential for wildfire in all or part of the state. Such a proclamation restricts smoking, fireworks, and outdoor burning activities to approved locations. (Prevention)
2. Conduct wildfire threat assessment. Wildfire threat assessments can be conducted prior to a wildfire occurring to facilitate mitigation and prevention measures, or when a major wildfire has occurred or is imminent to determine appropriate response and recovery strategies. Using GIS technology, the MDNR will conduct threat assessments, as required, during the early stages of a wildfire threat or occurrence to identify areas in potential danger based on fire characteristics, land use and development, population concentrations, topography, hydrology, soils, weather conditions, vegetative cover, and other relevant natural and man-made features. These threat assessments provide MDNR and other responding fire personnel with the information needed to make timely and appropriate decisions to reduce the danger to people and improved property from actual or impending wildfire threats. (Response)
3. Coordinate on-scene fire suppression activities. At the outset of a major wildfire, the MDNR Forest Resources Division will designate an IC to direct all fire suppression activities at the scene.

Michigan State Police (MSP)

1. Provide resources to investigate deaths or other illegal activities associated with wildfire. (Recover)

Michigan State Police (MSP) - Emergency Management Homeland Security Division (EMHSD)

1. Closely monitor magnitude of the fire with MDNR on the scene of the wildfire. Determine if wildfire presents as a major disaster, as far as possible destruction, and advise the Governor to contact FEMA Regional Administrator by telephone within 24 hours of the onset of the fire to request a federal declaration under the Fire Management Assistance Grant (FMAG).
2. Implement appropriate population protection measures, which may include evacuation or in place sheltering, with MDNR, MSP, and the local EMC. (Response)

Note: A FEMA Fire Management Assistance Declaration is issued to offer federal assistance in large wildfires and has replaced the FEMA Suppression Authorization or Agreement (As of October 2001), which was previously used.

NUCLEAR ATTACK (MILITARY)– WEAPONS OF MASS DESTRUCTION ATTACKS

NOTE: In the 2022 update of the MEMP, the Nuclear (Military) annex is not being updated due the recent (December 2021) updating of Radiological Emergency Preparedness requirements from the federal government. The tasks, descriptions, and other information in this annex are directly repeated from the 2018 version of the MEMP.

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures in a nuclear attack (military).

Nuclear Attack Threat. At least eight countries around the world now possess nuclear devices, while several more have secret nuclear weapons programs and may therefore be building bombs. While some of these "nuclear powers" are allies of the United States, others remain potential enemies. Though unlikely, it is possible that an international crisis in areas such as the Persian Gulf, the Taiwan Straits, or the Korean Peninsula could escalate into an exchange of nuclear weapons targeted at American (and possibly Michigan) cities and other targets. Fortunately, nuclear devices are very difficult to build, and this limits the availability of the weapons. A nuclear weapon more closely resembles a precisely built scientific tool than a simple bomb. Careful engineering and extremely rare materials are needed to make a working nuclear weapon.

Although this section addresses an organized (and therefore intentional) military attack, there also remains a risk from accidental, mistaken, or unauthorized launch of nuclear weapons. Even the most sophisticated technology may malfunction, and the best-trained and most disciplined personnel may make mistakes. Once a missile has been launched there is no way call it back, and a nuclear warhead fired in error will do just as much damage as one launched in anger.

A strike against the United States by a nuclear power could consist of a single weapon or thousands, depending on the strength and intentions of the attacker. The most likely form of organized military attack would be the launch of intercontinental ballistic missiles fired from thousands of miles away. Although the United States now has a limited ability to shoot down incoming missiles, there are fewer than 30 interceptor missiles of doubtful reliability. A very small attack or an accidental launch might possibly be stopped, but a larger attack would certainly strike the United States.

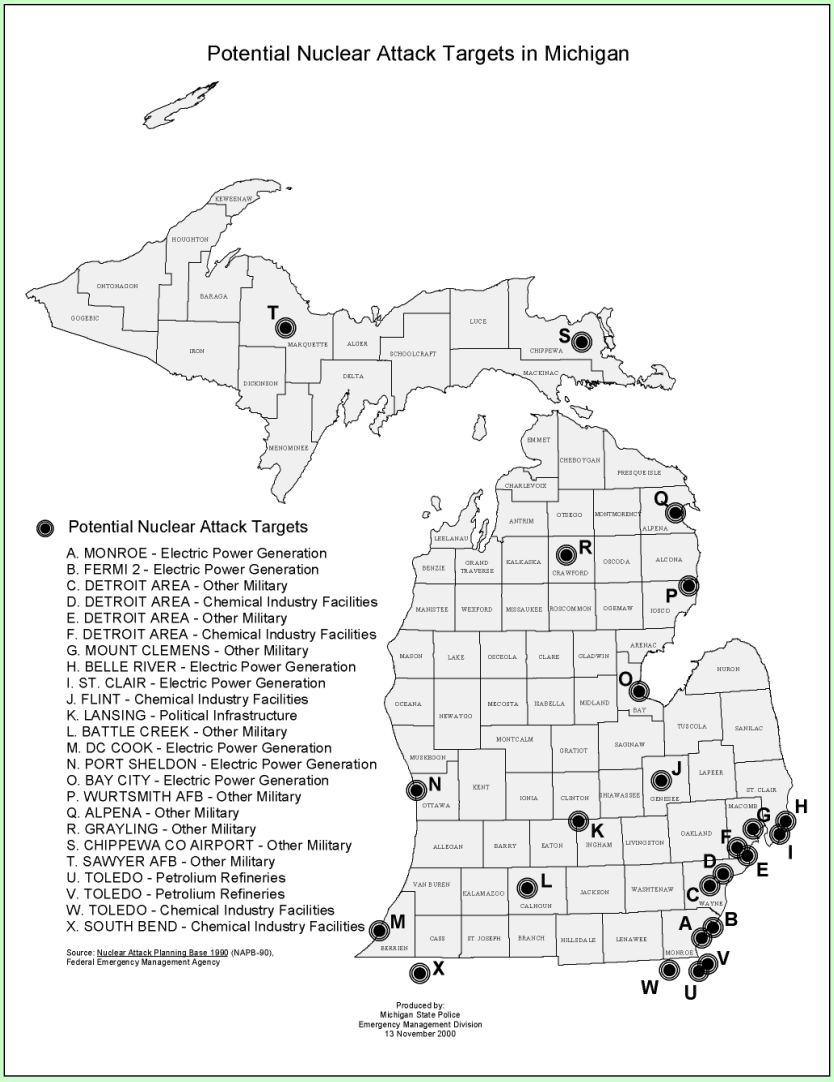
A nuclear power would have the ability to attack several locations at the same time. Multiple attacks across the United States would overwhelm national assets, forcing individual states or regions to rely on local resources. These attacks would probably be targeted on large cities and military bases and would use strategic nuclear weapons, each with a power of 100 kilotons or more. Cities would likely be attacked with airbursts, and military bases by the use of ground bursts. Other potential targets may include critical infrastructure and facilities (e.g., commercial power plants, chemical facilities, refineries), military support facilities (e.g., counterforce military installations, military support bases and industries), and political targets (e.g., state capitals).

(Refer to the background notes boxes on the following pages for pertinent information on potential attack targets in Michigan and nuclear detonation effects. Also refer to MSP/EMHSD Publication 103–Michigan Hazard Analysis, and MSP/EMHSD Publication 106–Michigan Hazard Mitigation Plan, for additional information on the organized nuclear military attack threat in Michigan.)

Background Notes on Nuclear Attack Targets: Despite the fact that it is based on a fully-armed and functional Soviet Union as an adversary (no longer the case due to the Soviet breakup), FEMA attack planning guidance provided in the document "Nuclear Attack Planning Base 1990" (NAPB-90) is still instructive because it identifies POTENTIAL nuclear attack target areas throughout the United States. These targets (based on the Soviet's military intentions at the time the information was collected) are categorized into seven classifications: 1) commercial power plants; 2) chemical facilities; 3) counterforce military installations; 4) other military bases; 5) military support industries; 6) refineries; and 7) political targets. In the NAPB-90 report, the State of Michigan has 25 identified target areas. In addition, four target areas near the Ohio and Indiana borders which directly affect Michigan jurisdictions are included in the target list found on the "Direct Effects Risk Area Planning Base Identified in NAPB-90" map below.

Although the NAPB-90 report is no longer a valid basis for the State's population protection strategy for nuclear attack, the target and postulated detonation information (1.0 MT warheads with 7,500-foot height of burst) provide valuable guidance for determining potential evacuation and shelter areas in the state. For areas identified as an aiming point subject to the most severe direct weapons effects including blast, heat, fire, and radiation, evacuation should be considered the primary population protection strategy. Shelter is the most viable population protection alternative for those areas not specifically identified as a potential target and where protective public shelters or home basements may provide an adequate level of protection from direct weapons effects.

Direct Effects Risk Area Planning Base Identified in NAPB-90



Map Notes: 1. The Palisades Nuclear Power Plant, located near Covert in Van Buren County, was not specifically listed in the NAPB-90 report as a potential nuclear attack target in Michigan; however, it is considered a potential target. 2. Wurtsmith and Sawyer AFBs are now closed and have been converted to other uses; however, much of the runway infrastructure that is capable of handling military aircraft remains in place.

Background Notes on Nuclear Detonation Effects: The map below illustrates the effects of a typical military nuclear missile warhead. This example shows the effects of a 750-kiloton air-burst detonation at an altitude of 8,000 feet on a clear day above a mid-sized American city. Such an attack would be representative of an attack on Michigan cities such as Grand Rapids, Lansing, Flint, or Ann Arbor. The rings in the illustration show distances from the center of the nuclear explosion.

Outer Ring: 6.3 miles across

At this distance, the exposed skin of persons outdoors will suffer immediate 3rd degree burns (8 kcal/cm^2). With medical services destroyed or overwhelmed, almost all severely burned victims will die. Within this ring, mass fires can be expected to develop within hours. Eventually, most of this area will be destroyed by fire.

Second Ring: 3.3 miles across

At this distance, the blast wave will totally destroy light frame structures, such as most homes (5psi). Sturdier buildings will be severely damaged, with their interiors destroyed. Winds of 160 miles per hour would then follow the blast wave.

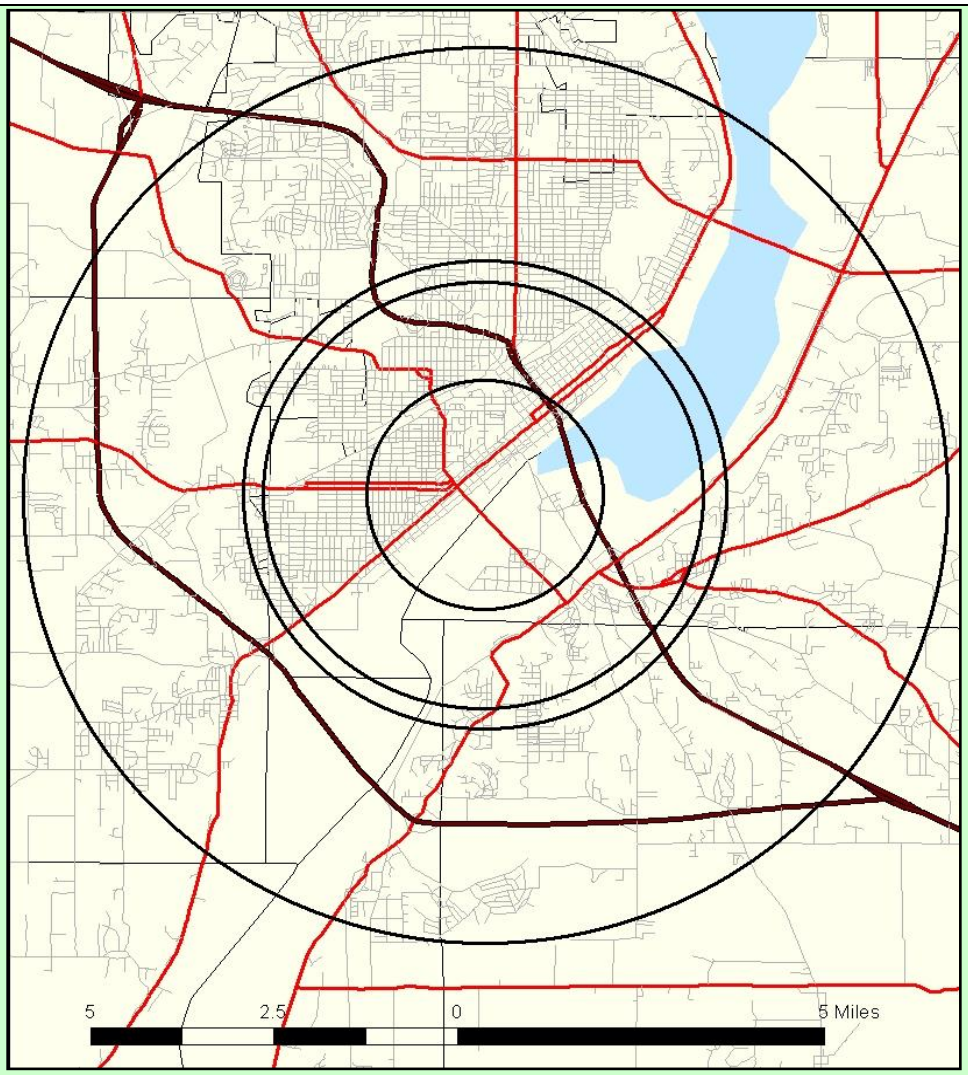
Third Ring: 3.0 miles across

At this distance, exposed persons will be affected by intense prompt radiation (5Gy). Between 50% and 80% of victims will eventually die from this exposure, unless first killed by blast or thermal effects.

Inner Ring: 1.6 miles across

At this distance, the blast wave will totally destroy even reinforced concrete buildings (20psi). Winds of 230 miles per hour will follow the blast wave. Essentially everyone within this ring will be killed immediately.

Lighter damage will extend well beyond the area depicted in this map, mostly due to the effects of the thermal pulse.



General Response Procedures for an Organized Military Nuclear Attack. Response to an organized military nuclear attack against the United States is the joint responsibility of federal, state, and local government. If an attack is imminent or anticipated due to increased international tension, the President may proclaim a "national civil defense emergency". If such action occurs, the Governor will declare a State of Disaster under the Michigan Emergency Management Act, thus activating the response and recovery aspects of the MEMP and all local EOPs in the state. State and local government will implement population protection actions and other attack preparedness, response, and recovery activities according to the Enemy Attack Emergency Action Level Classification System (refer to the table with the same title). This includes activation of the Michigan Continuity of Government Plan (MCOGP), state department / agency Continuity of Operations Plans (COOPs), and all local government COG plans and COOPs in the state, to ensure the continuation of Essential Functions and Constitutional governance in the pre-, trans-, and post-attack periods.

Emergency Operations Centers. In the event of an enemy attack threat or an actual attack, the SEOC and local EOCs comprise a statewide capability to ensure continuity of operations throughout the crisis period. The primary SEOC is located on the fringe of Lansing–an area that is a possible target due to its political importance. Therefore, it is considered a planned evacuation area to protect the population from the direct weapons effects of blast, heat, fire, and radiation. The SEOC will be activated and staffed until the Alternate State Emergency Operations Center (ASEOC) is established at a location determined by the MSP/EMHSD and Governor. All SEOC personnel will be relocated immediately to the ASEOC when established. SEOC personnel will be assigned to staff two twelve-hour shifts unless circumstances dictate the need for a different staffing pattern.

Continuity Facilities. An organized nuclear military attack will likely trigger activation of Alternate Seats of Government (ASGs) and Alternate Operating Facilities (AOFs) at both the state and local levels, in accordance with the MCOGP, local COG plans, and state and local COOPs. The purpose of these facilities is to ensure the continuation of Essential Functions and the preservation of Constitutional governance throughout the attack, at both the state and local levels. (The locations of these facilities are identified in the various continuity plans.) At the state level, every attempt will be made to co-locate the ASEOC and ASG or locate the two facilities in close proximity to each other to maximize attack response and recovery coordination. (Details are found in the MCOGP.)

Assistance Requests and Incident Reporting. Local EOCs will submit incident summary reports and requests for assistance directly to the SEOC or ASEOC via the MI CIMS (if operable) or by alternate means as described in this Procedure and the Warning and Communications ESF. The MSP/EMHSD District Coordinators will work from their respective District Headquarters and maintain contact (to the extent possible) with local EOCs, the SEOC/ASEOC, and state and local ASGs (if activated). Local EOCs will coordinate population protection activities and all other attack preparedness, response, and recovery activities as established in the local EOP.

Attack Warning and Classification. Attack warning originates at the National Warning Center (NWC) located in the Combat Center, North American Aerospace Defense Command (NORAD), Colorado Springs, Colorado. The National Warning Center is the primary control for the National Warning System (NAWAS). Enemy attack information is received from FEMA through the warning systems described in the Warning and Communications ESF. Federal Telecommunications System (FTS) land lines, secure telephone, and the Federal National Message System (FNAMS) are the primary means of communication. The FEMA National Radio System (FNARS) and regular land line telephones serve as the alternative means of communication.

As attack information is received in the SEOC / ASEOC, the various SEOC Sections (e.g., Incident Management, Operations, Planning, etc.) will jointly assess the situation and then classify it according to the Enemy Attack Emergency Action Level Classification System. MSP Operations will be notified of this classification, and it will disseminate this information via NAWAS, LEIN, and other means in accordance with MSP Official Order No. 3.

Attack Communications.

<u>SEOC Communications</u>. The SEOC Emergency Communications Center is equipped to provide for attack warning and communications statewide. The SEOC will disseminate information received from the federal government (through FEMA) via the communications links described in the Warning and Communications ESF. Telephone, NAWAS, and the Emergency Alert System (EAS) will serve as primary means of communication, with LEIN for hardcopy confirmation. The MSP radio system is the primary radio network for direction and control and warning. AUXCOMM volunteers provide an alternate means of communications when traditional communications are overloaded. ARES/RACES, MARS, and CAP all have equipment in the SEOC and are capable of voice and data transmission.

<u>ASEOC Communications</u>. Once the ASEOC is established, all communications links will be shifted to that facility. The DTMB is responsible for providing and coordinating a communications capability for the SEOC and ASEOC. The DTMB will arrange for the installation or hook-up of telephones or other special features such as line load control. The

MSP/EMHSD will determine the appropriate links to be established and arrange for personnel to staff these links. As necessary, MSP Operations may be requested to provide personnel to staff communications links in a support capacity.

Supplemental Communications. The MDNR, MDOT, and MDMVA will provide additional radio communications capability. Amateur radio, Civil Air Patrol, and other groups may also provide supplemental communications at the SEOC/ASEOC and local EOCs. The MSP mobile command vehicle can also be dispatched upon MSP/EMHSD request to provide supplemental communications capability to the SEOC/ASEOC. The MSP mobile command vehicle is equipped with low band, VHF, UHF, and 800 MHz radio systems, land line telephones, antennas for cellular telephones, and satellite/remote LEIN with modem. MSP Operations, in cooperation with the MSP/EMHSD, will coordinate the use of this additional equipment and assure its proper interface. MSP Operations will also coordinate the use of frequencies, including the designation of emergency frequencies and the restriction of traffic on certain frequencies.

Public Information. When the decision is made to implement protective actions for a nuclear attack, the SPIO and JIT will make appropriate public announcements via news briefings and the EAS. The EAS can be activated by telephone or remote pickup unit from the SEOC, or ASEOC when established. The SPIO and JIT will operate from the SEOC/ASEOC until public information operations are transferred to a Joint Information Center (JIC) established at or near the ASEOC. Periodic news briefings will be conducted for media representatives at the JIC for the purpose of providing status updates on protective actions (evacuation and protective sheltering), resource management issues, and related general survival instructions. This information will also be disseminated to the public through EAS announcements. Local emergency management program jurisdictions are responsible for developing public information systems that address locally-specific issues such as evacuation routing, locations of shelters, mass feeding, and survival supplies. (Refer to the Information and Planning ESF for additional details on public information operations.)

Critical Nuclear Attack Preparedness and Response Actions

ALL state departments / agencies:

Implement Continuity of Operations Plans (COOPs) at the direction of the Governor. Each department/agency has developed a COOP to ensure the continuation of Essential Functions in the pre-, trans-, and post-attack periods. These plans will be implemented by department/agency directors at the direction of the Governor or his/her designee. (See related task assignments below.)

Suspend nonessential operations. Each department/agency director will determine which operations should be suspended, curtailed, or consolidated preceding a nuclear attack to facilitate relocation of staff and resources. Essential Function operations will be transferred to an AOF (locations identified in department/agency COOPs) to ensure their continuation, or resumption when conditions permit.

Ensure emergency assignments are staffed. The department/agency director will provide liaison to the SEOC/ASEOC for the purpose of coordinating response and recovery operations. The director will also ensure that adequate staffing for department/agency Essential Functions is maintained, in accordance with the department/agency COOP.

Inform staff of emergency procedures. The department/agency director will alert executive staff of the emergency procedures to be followed in a nuclear attack, including individual protective measures, reporting, requests for assistance, suspending or curtailing operations, relocation, pre- and post-attack staffing patterns and work locations, and the protection of vital records and resources. This information, contained in the department/agency COOP, will immediately be disseminated to all department/agency staff utilizing the most expedient communication channels available at the time, up to and including the use of the media.

Ensure vital resources are protected. The department/agency director will ensure that vital department/agency resources (e.g., records – hardcopy and electronic, materials/supplies, equipment, etc.) are relocated to a safe location away from the direct weapons effects of a nuclear attack, in accordance with the department/agency COOP. Generally, vital resources will be relocated to the department/agency AOF, or to another facility outside the target area if appropriate for the continuation or resumption of Essential Functions.

MSP/EMHSD; EXECUTIVE (GOVERNOR'S) OFFICE; MICHIGAN JUDICIARY; AND MICHIGAN LEGISLATURE:

Implement the Michigan Continuity of Government Plan and coordinate continuity of government activities to facilitate recovery. If a nuclear attack is imminent, the MSP/EMHSD will work with the Executive, Legislative, and Judicial Branches of state government to implement the MCOGP to provide for the continuation of Constitutional governance during the pre-, trans-, and post-attack periods. This may include the establishment and operation of an Alternate Seat of Government (ASG). It is highly likely that COG operations will continue well into the post-attack

recovery period. State department/agency COOPs and local government COG plans and COOPs will also be implemented to provide for statewide governmental continuity and stability. (Refer to the MCOGP–a Support Plan to the MEMP–for more detailed information on statewide COG operations.

Note: Continuity of government is the most essential governmental service because government's primary (and most critical) mission is the preservation of itself. Without a viable and functioning governmental organization, other essential governmental services that protect public health, safety and well-being, property, and the environment cannot occur. Therefore, COG will always be the primary and most critical mission of state government. Without it, lives and property would be put in jeopardy, essential services would not be delivered as needed, and Constitutionally-mandated processes that provide governmental validity and viability would not occur.

MICHIGAN DEPARTMENT OF EDUCATION (MDE):

Issue emergency advisories to school districts. The Superintendent of Public Instruction, in collaboration with the MDHHS-Health, will issue emergency advisories to intermediate school districts at appropriate times preceding an imminent attack or during the immediate post-attack period, regarding the protection of students, suspension of school activities, and the use of school resources to support population protection measures. Such advisories will be issued through the MDE EMC, who in turn will forward the information to intermediate school districts through the SEOC/ASEOC and JIC. Local school districts will be notified by the appropriate intermediate school district. These advisories are necessary to ensure that each local school district fully understands the situation and takes the necessary actions to protect students and support emergency operations. Directives regarding suspension of school and the release of students will be implemented locally per district procedure.

MICHIGAN DEPARTMENT OF MILITARY AND VETERANS AFFAIRS (MDMVA):

Provide information on troop convoy movements. In a nuclear attack, some portion of the Michigan National Guard will likely be federalized and placed on active duty under the command of the United States Northern Commander. If that occurs, forces for land defense and support to civil authorities in the state will be allocated by that command and placed under the Joint Forces Headquarters–Michigan (JFHQ-MI). The Joint Forces Headquarters/Joint Operations Center (JFHQ/JOC) will be activated to coordinate military operations and support to civil authorities.

The MDMVA EMC will keep SEOC/ASEOC staff informed of troop and equipment convoy movements within the state to avoid a conflict with major evacuation routes and transportation staging areas for the general population. This information will be released to the public through the EAS and JIC, in accordance with the MNG Public Information Program and in cooperation and coordination with the MSP/EMHSD.

Attack Assessment. In an attack, assessment will be performed by local EOCs and reports submitted to the SEOC/ASEOC to allow for a coordinated response by the state. The State Radiological Defense Officer (SRDO) from the MSP/EMHSD is responsible for planning and coordinating the Radiological Defense (RADEF) program for the state. Essential elements of this program are: 1) a reporting network, consisting of the SEOC/ASEOC and local EOCs; 2) a standardized reporting system; 3) an analysis and evaluation capability; and 4) a state training program, including the capability to provide "crisis" training preceding an attack.

State RADEF Organization. In order to carry out this program, a state RADEF organization–consisting of applicable state and local departments/agencies with radiological monitoring capability–will be formed. Specific reporting relationships have been established to help ensure an accurate flow of radiological information. (See the "State Radiological Reporting Procedures" section.)

The SRDO is responsible for working with involved state departments / agencies to develop a RADEF program and self-protection support system, capable of protecting state personnel during out-of-shelter activities. As part of that effort, each state department/agency EMC is responsible for the organization and development of a RADEF program for their department/agency, including designation of a Radiological Defense Officer (RDO) to coordinate RADEF training and planning activities.

SEOC Planning Section. Various types of specialized units (i.e., Assessment Unit, Documentation Unit, Resource Unit, and Situation Report Unit) will be formed as needed within the SEOC Planning Section to collect, analyze, synthesize, display, and report attack-related information. This will include information on nuclear detonations (NUDETS) and radioactive fallout, protective actions taken and their status, damage reports, decontamination efforts, status of essential resources and vulnerable populations, and other information as appropriate. Most assessment information will come from local EOCs, state departments/agencies and the state RADEF organization, and the federal government. The SEOC Planning Section will support the SEOC Operations Section and SEOC Incident Management Section in providing technical data upon which decisions for response and recovery actions can be made. As necessary and appropriate, technical experts from EGLE, MDMVA, and MDLARA (for radiological hazards), and other departments/agencies will be integrated into the various SEOC Planning Section units to assist in the attack assessment.

Critical Pre-Attack Assessment Actions

STATE RADIOLOGICAL DEFENSE OFFICER (SRDO) – PRE-ATTACK PHASE:

Notify RADEF personnel. The SRDO will ensure that members of the state RADEF organization are notified and mobilized as necessary.

Coordinate "crisis" training of RADEF personnel. "Crisis" training for radiological monitors will be initiated at the Alert Level of the Enemy Attack Emergency Action Level Classification System. The SRDO will coordinate this training to ensure that state and local personnel have the basic skills, knowledge, and guidance needed to minimize the effects of fallout radiation to facilitate recovery efforts in a radiological environment.

Radiological monitor instructors from (or arranged by) the MSP/EMHSD will provide training for department/agency radiological monitors to enable them to carry out Essential Functions in the post-attack environment. This concept of "self-protection monitoring" is basic to the ability of each department/agency to provide Essential Functions to the public and other stakeholders. Basic procedures and assignments will be reviewed as part of that training. Radiological training for shelter monitors will be provided for appropriate state personnel (primarily from the MDHHS-Human Services). These monitors will then be assigned to shelters for state personnel, located at or near the ASEOC.

Training will consist of a combination of classroom instruction, instructional videos, and hands-on demonstrations, based on guidance provided by the federal government. Each MSP Post has (or will be provided with) a "crisis" training set to use in training troopers in radiological monitoring. Training will be provided to other departments/agencies as required and appropriate for their attack-related role(s) and responsibilities.

Coordinate RADEF equipment distribution. The SRDO will coordinate the distribution of available (and properly calibrated) RADEF equipment to local and state departments/agencies on a priority basis.

Review RADEF reporting procedures. During the pre-attack period the SRDO will review, with state and local officials (via the MI CIMS, LEIN or other appropriate means), the procedures for reporting radiological data.

SEOC PLANNING SECTION – PRE-ATTACK PHASE:

Record attack information. The following information will be recorded on status boards and/or other visual displays in the SEOC/ASEOC as it is received:

- Description of the attack threat.
- Enemy Attack Emergency Action Level Classification.
- Protective actions ordered by the President and/or Governor.
- Status of evacuation and sheltering efforts.
- Status of resource use/availability.
- Status of any damage or injuries from pre-attack actions.
- Other pertinent information, as appropriate.

Plot attack information on maps. The following information will be recorded on appropriate maps in the SEOC/ASEOC as it is received:

- Major evacuation routes.
- Traffic conditions along evacuation routes, including conditions that might impede or inhibit vehicular movement (e.g., major construction, accidents, vehicles out of fuel, etc.).
- Traffic/access control points.
- Rest areas and gasoline stations.
- Essential resource relocation staging areas.
- Major transportation pickup points.
- Evacuation status.
- Locations of major public fallout shelters and their capacity / status.
- Status of upgrading efforts at major shelters.
- Location of essential resources (e.g., food warehouses, fuel storage facilities, pharmaceutical manufacturers, etc.).

- Location of major populations and/or facilities requiring special protection or handling (e.g., large hospitals, correctional facilities, nursing homes, mental health facilities, universities, etc.).
- Other pertinent information, as appropriate.

Track available and expended resources. If time and circumstances permit, the Planning Section (Resource Unit) will work with the Operations Section in the SEOC/ASEOC to compile and track available resources, as well as resources expended or committed, so that response and recovery actions are based on the most current and accurate resource information base possible.

ALL STATE DEPARTMENTS/AGENCIES – PRE-ATTACK PHASE:

Provide crisis training for radiological monitors. State departments/agencies have a responsibility to ensure that a sufficient number of their personnel are trained in radiological monitoring so that workers can effectively and safely perform essential functions and services in the post-attack radiological environment. Many departments/agencies have essential post-attack functions to perform to protect public health, safety and welfare, maintain law and order, and ensure the continued functioning of the Executive, Legislative, and Judicial Branches of government. In addition, shelter monitor training must be provided for MDHHS-Human Services staff who will be assigned to shelters for state personnel, located at or near the ASEOC.

Radiological monitor instructors will be arranged by the MSP/EMHSD. Other state departments/agencies with subject matter experts in radiological monitoring (e.g., EGLE, MDMVA, MDLARA) will provide instructional support as required in training department/agency radiological monitors. Training will consist of a combination of classroom instruction, instructional videos, and hands-on demonstrations, based on guidance provided by the federal government.

Critical Attack Analysis Actions

STATE RADIOLOGICAL DEFENSE OFFICER (SRDO) AND ASEOC PLANNING SECTION – ATTACK ANALYSIS PHASE:

Collect and compile attack-related information. Immediately following a nuclear attack, the first priority is attack analysis. The SRDO and ASEOC Planning Section are responsible for collecting (as conditions permit) and compiling pertinent attack-related information from local EOCs, state departments/agencies and the state RADEF organization, and the federal government. Attack information will be reported to the ASEOC in accordance with the procedures outlined in the “State Radiological Reporting Procedures” section.

It is assumed that the actual location of ground zero (GZ), the weapon size, and the type of burst (air or ground) may not immediately be available. This may be due to communications disruptions, the inability to collect information, or simply a lack of information from credible sources. Consequently, the Planning Section may have to rely on rudimentary estimating procedures involving analysis of fragmentary information on various characteristics associated with the nuclear detonation for deriving the location of GZ, the weapon size, and type of burst.

Critical Post-Attack Assessment Actions

STATE RADIOLOGICAL DEFENSE OFFICER (SRDO) – POST-ATTACK PHASE:

Review and interpret fallout history curves and predictions. The SRDO, working in conjunction with the ASEOC Planning Section and its radiological subject matter experts, will review, evaluate, and interpret fallout history curves for the state. Depending on the remaining communications capability, information from the federal government on fallout levels may be limited or non-existent. Therefore, the State may be forced to rely on its own ability to develop fallout history curves based on federal guidance and the best information available in the ASEOC at the time. If communications capability is such that communications between local EOCs and the ASEOC is severely hampered, local RDOs will be responsible for the preparation, evaluation, and interpretation of fallout contour maps and predictions for their jurisdiction, based on the best available information.

Fallout exposure rate contour maps will be prepared in the ASEOC using the information collected on fallout levels (if available). By indicating the severity and geographic scope of fallout problems, fallout contour maps will help provide a basis for making operational decisions involving recovery activities and the status/use of available resources. Dose and dose rate charts will be developed as needed for affected areas.

Advise on state decontamination activities. State and local facilities that survived the attack must be decontaminated before they can be used again. Radiological decontamination includes any measures used to reduce radiation exposure.

Radioactivity cannot be destroyed; however, fallout radiation can be reduced by 1) removing radioactive materials from contaminated surfaces; 2) covering the contaminated surfaces with shielding materials (such as earth); or 3) isolating contaminated objects and waiting for the radiation levels to decrease through the process of radioactive decay.

The SRDO and the radiological subject matter experts in the ASEOC Planning Section will advise state departments/agencies and local government on decontamination measures, in accordance with guidance provided by the federal government. The DTMB is ultimately responsible for the management and use of state-owned and leased facilities. Consequently, the DTMB is responsible for arranging for and coordinating the decontamination of state facilities in the post-attack environment. Essential facilities will be identified and given priority in decontamination efforts. Such determinations will be made in the ASEOC, based on damage reports received and the operational needs of state government at the time.

The MDARD, EGLE, and MDHHS-Health will monitor and coordinate decontamination or disposal of food and water supplies.

ASEOC PLANNING SECTION – POST-ATTACK PHASE:

Prepare damage and casualty estimates. As soon as the post-attack radiological environment allows, state and local assessment teams will be dispatched to conduct detailed damage assessment surveys to determine the nature and extent of damage and impacts, and the number of casualties. Standard damage assessment procedures and forms will be utilized to collect, compile, and report damage, impact, and casualty information. Local assessment information will be reported to the local EOC per established procedure. Local EOCs, in turn, will report assessment information to the ASEOC. State departments/agencies will report damage assessment information to their ASEOC representative, who in turn will provide the information to the ASEOC Planning Section for review, compilation, analysis, synthesis, and reporting.

Damage, impact, casualty, and other pertinent information will be compiled and recorded on status boards and maps by the ASEOC Planning Section. ASEOC staff will use this information to help make key operational decisions concerning the post-attack recovery. This information will also provide the basis for developing assistance requests to the federal government.

Conduct state resource evaluation. The ASEOC Planning Section (Resource Unit) will work with the ASEOC Operations Section to conduct a state resource evaluation to determine the number and type of resources damaged or destroyed, and the number and type of resources available for use in the post-attack recovery. This resource evaluation will be based on local, state, and federal damage assessment reports and field surveys, or reconnaissance conducted by local and state personnel. Critical resources will be given priority status in the evaluation and assessment process.

State Radiological Reporting System. The following system for measuring radiation and reporting fallout information between levels of government is necessary for protection of the public against fallout, and for directing the efforts of personnel engaged in survival and recovery operations.

Counties and Municipalities. Counties and municipal emergency management program jurisdictions will report radiological information directly to the ASEOC.

State Radiological Monitors/Monitoring Teams. Radiological monitors and monitoring teams from state departments/agencies will report radiological information directly to the ASEOC. Aerial radiological monitoring information (e.g., from the Civil Air Patrol, MDMVA) will also be reported directly to the ASEOC.

ASEOC. The ASEOC will report radiological information to DHS/FEMA (Region V RRCC) and to other federal facilities as directed by DHS/FEMA. Information will be reported to neighboring states and the Province of Ontario, Canada under reciprocal agreement and by request only.

Method of Reporting. The following means of communication will be utilized, in order of preference, for counties and municipalities to report radiological information:

MI CIMS. If the system is operable, it should be used to report radiological information.

Telephone. All communities have contact with the ASEOC via commercial telephone. Even after a nuclear attack, it is felt that this means of communication will remain operative in many areas. Dedicated open telephone lines will be established (to the extent possible) between local EOCs and the ASEOC to assure continuously available, uninterrupted communication.

LEIN. Most counties and municipalities have LEIN capability. The LEIN provides hardcopy confirmation.

Police Radio. Police radio is the primary radio network for direction and control in an enemy attack.

Backup Systems. The following means of communication can be used as backup systems in the event the primary reporting systems outlined above are restricted or inoperable:

800 MHz Radio. Many local communities and public agencies have 800 MHz radios that can be used to transmit radiological reports to the SEOC/ASEOC.

MDOT Radio. The MDOT has radio equipment in county road commission garages in most Michigan counties.

Radio Amateur Civil Emergency Service (RACES). Amateur radio can be utilized to the extent that it is organized and operative in the community in question.

Reporting Intervals and Formats. Organized, systematic, and consistent reporting intervals and formats are essential to keep the MI CIMS and LEIN system, radio frequencies, and telephone lines from becoming jammed with unnecessary traffic. To that end, when the dose rate from fallout reaches 0.1 R/hr, local EOCs are to report this information using the following reporting interval and format guidelines:

Counties and Municipalities.

Reporting Intervals. Military or 24-hour clock time will be used in all RADEF reporting. After the initial fallout reading is reported, readings will be taken and reported by local EOCs to the ASEOC every hour for the first 24 hours after the initial report. From 24 to 48 hours after the initial fallout report, readings will be taken and reported every six hours at 0300, 0900, 1500, and 2100. After this early fallout period (i.e., 48 hours after the arrival of fallout), readings will be taken and reported once a day at 0300 until notified by the ASEOC to cease transmittal of readings. RADEF reports will be compiled by local EOC staff and reported to the ASEOC every six hours for the first 48 hours, and daily after that. Local reports to the ASEOC will be based on average readings for the following times: 0300, 0900, 1500, and 2100 for the first 48 hours, and at 0300 only for the remainder of the time.

Reporting Format. The name of the county or municipality will be reported first, followed by any secondary location designator as appropriate (i.e., the name of a city or village in a county), followed by the date, followed by the time (in military/24-hour time), followed by the reading.

For example:
Livingston County EOC/9-30-91/0900/0.38 R/hr
or
Livingston County/City of Brighton/9-30-91/1200/0.56 R/hr
or
City of Grand Rapids/9-30-91/1600/0.44 R/hr

ASEOC.

Reporting Intervals. RADEF reports from local EOCs will be compiled at the ASEOC to provide a comprehensive and accurate portrayal of the fallout patterns affecting the state. This information will be provided to DHS/FEMA (and other federal departments/agencies per DHS/FEMA request). It will be provided to adjacent states and the Province of Ontario, Canada upon reciprocal agreement and by request only.

The ASEOC will broadcast the first report it receives from a local EOC to all other EOCs in the district. A comprehensive dose rate report will be broadcast to each local EOC in the district at 12 hours, 24 hours, and 48 hours after the arrival of fallout. Unscheduled reports may be made to local EOCs if it is necessary to assist local and state departments/agencies in performing specific missions. Primary attention will be given to scheduled dose rate reporting.

Reporting Format. The district number, followed by the date, followed by the time of the reading, followed by the counties/municipalities and their readings.

For example:

- District 5/9-30-91/0900/
- Allegan County/0.40 R/hr.

- Barry County/0.44 R/hr.
- Berrien County/0.56 R/hr.
- Cass County/0.60 R/hr.
- Kalamazoo County/0.39 R/hr.
- St. Joseph County/0.66 R/hr.
- Van Buren County/0.42 R/hr.

State Government Post-Attack Continuity Operations.

Alternate Operating Facilities. Each state department/agency must, in its COOP, identify essential personnel and resources and an AOF (or AOFs) necessary for the execution of its Essential Functions in the post-attack period. Because Lansing is a possible attack target due to its political importance and is therefore considered a planned evacuation area, each state department/agency must select an AOF (or AOFs) located outside of the potential direct effects risk area boundary (approximately 6.3 miles in any direction from downtown Lansing) from which it will conduct Essential Functions. When attack is imminent, identified essential state personnel will evacuate the Lansing area with the general populace. As soon as conditions allow evacuees to leave shelters, the essential state personnel will report to their regular work location in Lansing, if the location is undamaged, or to the AOF(s) identified in their department/agency COOP to resume Essential Functions.

State department/agency Essential Functions will be conducted at designated AOFs until conditions in Lansing allow for the transfer of personnel and resources back to their normal Lansing area work locations, or to another designated location. If the Lansing area work locations are not usable, the departments/agencies will continue to conduct Essential Functions at their designated AOF(s), in accordance with their COOPs, until such time as more permanent arrangements can be made for work facilities.

Alternate Seat of Government. When attack is imminent, designated elements of the Executive, Legislative, and Judicial Branches of Michigan State Government will relocate to an ASG at a location identified in the Michigan Continuity of Government Plan (MCOGP). (Multiple potential ASG sites have been identified in the MCOGP to provide a range of relocation options in response to incident conditions. The selected ASG will be located outside of the boundary of any potential direct effects risk area.) After the attack, when conditions allow, an assessment will be conducted of the Lansing area state governmental complexes to determine if they are too severely damaged for use. (It is expected that all facilities will have to be decontaminated before re-use.) If the Lansing state governmental complexes are not severely damaged after the attack and they can be adequately decontaminated, the Executive, Legislative, and Judicial Branches will re-convene in Lansing to reconstitute Michigan State Government. If conditions do not allow for reconstitution in Lansing, the ASG will remain operational until such time as more permanent arrangements can be made for work facilities.

Note: The MCOGP and department/agency COOPs contain detailed information regarding Michigan State Government continuity operations. All of these documents have restricted access and therefore are only available to those authorized individuals that have a designated continuity role. State department/agency COOPs are electronically housed on a restricted access business continuity management software that is maintained and controlled by the DTMB. The DTMB oversees and administers the state department/agency COOP process. The MSP/EMHSD maintains the MCOGP, in partnership with the DTMB and the Executive, Legislative and Judicial Branches, as a Support Plan to the MEMP.

Critical Attack Recovery Actions

DEPARTMENT OF ENVIRONMENT, GREAT LAKES, ENERGY (EGLE):

Coordinate state field team radiological assessment and control activities:

Coordinate field team radiological monitoring and sampling.
Using the information obtained through radiological monitoring and sampling and from other sources, assess the nature and extent of the attack.
Assess meteorological conditions using information (as available) from the National Weather Service, state meteorologists, online meteorological web sites, local EOCs, and other sources.
Assist in assessing protective action recommendations.
Coordinate the distribution of dosimetry to state emergency workers and maintain records of exposure.
Control exposure to the extent possible.
Based upon the attack assessment, assist in defining (by identifiable geographic boundaries) the area(s) actually or potentially affected by radioactive fallout and radiological contamination.

Note: Definition of geographic boundaries will be a joint cooperative effort between the MSP/EMHSD, EGLE and other radiological subject matter experts in the SEOC / ASEOC Planning Section. Assessment information for making these determinations will likely come from a variety of sources.

Assist in screening the public for radiological contamination. EGLE will coordinate with the MSP/EMHSD in locating, setting up, and overseeing portal monitor screening of shelter populations with potential radioactive contamination.

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (MDLARA) / MICHIGAN PUBLIC SERVICE COMMISSION (MPSC):

Coordinate post-attack energy resource distribution. Control and coordination of the distribution and use of energy resources is a critical post-attack function. Electricity, natural gas, fuel oils and gasoline must be readily available and equitably distributed to facilitate the relocation and sheltering of the population, but perhaps most importantly, they must be available to aid in post-attack recovery. The MPSC (EGLE) has a vital role in securing the cooperation of energy companies and the energy industry in the redistribution of energy resources as needed. Strict control over the distribution and use of energy resources may be necessary in the post-attack environment.

This effort will be carried out under the direction of the MPSC (EGLE) and Governor's Office, in coordination with the MSP/EMHSD, based on recommendations made in accordance with 1982 PA 191. A representative of the MPSC (EGLE) will be present in the SEOC/ASEOC to advise state officials on matters pertaining to energy resources and to coordinate the control and redistribution of energy resources as needed. (Refer to the Technological Disaster Procedures/Energy Emergencies.)

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET (DTMB):

Coordinate decontamination of state facilities. State facilities that survive a nuclear attack will have to be decontaminated before they can be used again. The DTMB is ultimately responsible for the management and use of state owned and managed facilities. Consequently, it is responsible for arranging for and coordinating the decontamination of the state facilities in the post-attack environment.

Radiological decontamination includes any measures used to reduce radiation exposure. Radioactivity cannot be destroyed; however, fallout radiation can be reduced by 1) removing radioactive particles from contaminated surfaces; 2) covering the contaminated surfaces with shielding materials (such as earth); or 3) isolating contaminated objects and waiting for the radiation levels to decrease through the process of radioactive decay.

Essential facilities will be identified in the SEOC/ASEOC and given priority in post-attack decontamination efforts. Such a determination will be based on damage reports received and the operational needs of state government at the time. The SRDO will provide advice on decontamination measures, in accordance with guidance provided by the federal government.

MICHIGAN STATE POLICE (MSP) AND MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT):

Implement the Michigan Emergency Highway Traffic Regulation (EHTR) Plan. The post-attack environment will likely pose significant challenges because much of the State's transportation network may be damaged or destroyed by direct weapons effects or otherwise made unusable due to debris, radioactive fallout, or other impediments. In addition, the post-attack recovery will require that military and emergency services organizations be given priority usage of the available transportation infrastructure. The MSP and MDOT will jointly implement the EHTR Plan during the post-attack recovery period to regulate and control traffic on the state highway network (which includes all federal, state, county, and local highway systems, and facilities) in order to adequately accommodate essential recovery activities and priority shipments of materials, equipment, and personnel.

Nuclear Attack Emergency Action Level Classification System

Classification	Initiating Condition	State Actions	Primary Agency
COMMUNICATIONS WATCH	A state of tension exists that requires continuous monitoring of the situation.	Minimally activate the SEOC for communications purposes. Establish 24-hour communications with state agencies, the federal government, and local governments. Alert key officials, including SEOC staff, to review and update the MEMP and nuclear attack procedures. Review staff augmentation procedures. Review crisis training procedures. Review procedures for relocating essential government staff and resources to alternate locations to continue essential government functions. Review procedures for suspending nonessential government functions and redirecting personnel to essential functions.	MSP/EMHSD MSP/EMHSD MSP/EMHSD All agencies MSP/EMHSD All agencies All agencies
ALERT	A state of tension and deteriorating relations exists, necessitating that a high degree of emergency preparedness be maintained.	If incident warrants this classification level at the onset, consider all actions listed under the previous level above, if not already accomplished. Partially activate the SEOC for communications, recordkeeping, assessment, and public information. Ensure attack warning systems are operational. Initiate accelerated ("crisis") training programs for emergency functions. Prepare for increased public information activity. Review procedures on preservation of vital records. Inform key executive, legislative, and judicial staff of continuity of government arrangements so they can review the MCOGP and related procedures, etc.	All agencies MSP/EMHSD MSP/EMHSD, MSP Operations MSP/EMHSD MSP/EMHSD, Governor's Office All agencies MSP/EMHSD, Governor's Office
NATIONAL EMERGENCY	Increased world tension suggests that an attack could occur. The highest degree of readiness should be maintained.	If incident warrants this classification level at the onset, consider all actions listed under the previous level above, if not already accomplished. Fully activate the SEOC and begin relocation procedures to the ASEOC. Activate attack warning systems. Implement the MCOGP and department/agency COOPs; establish continuity facilities per the various plans. Provide accurate, ongoing information to the media from the SEOC/ASEOC or JIC. Direct local authorities to implement protective action orders issued by the Governor. Compile, record, and assess evacuation and sheltering information from state agencies, local governments. Direct state agencies to protect essential resources, including vital records. Suspend nonessential government functions. Coordinate food redistribution efforts. Issue emergency advisories to school districts. Coordinate the use of state facilities/equipment to support emergency operations. Provide information on troop convoy movements; coordinate/provide military support to civil authorities.	All agencies MSP/EMHSD MSP/EMHSD, MSP Operations MSP/EMHSD, Governor's Office, Legislature, Judiciary, DTMB MSP/EMHSD, Governor's Office, JIT MSP/EMHSD MSP/EMHSD MSP/EMHSD, Governor's Office All agencies MDARD MDE DTMB MDMVA

Nuclear Attack Emergency Action Level Classification System (cont.)

Classification	Initiating Condition	State Actions	Primary Agency
ATTACK	An attack has occurred or is imminent.	Activate warning systems. Activate and assign state shelter monitors. Take shelter. Maintain continuous 24-hour communications with the federal government and local governments, if possible. Compile, record, and assess information on nuclear detonations and damage estimates. Provide radiological emergency response resources.	MSP/EMHSD, MSP Operations MSP/EMHSD, MDHHS-Human Services All agencies MSP/EMHSD, DTMB MSP/EMHSD, EGLE, MDLARA, MDMVA EGLE, MDLARA, MDMVA
POST-ATTACK RECOVERY	The attack is over and recovery begins.	Maintain communications with the federal government and local governments, if possible. Prepare damage/casualty estimates. Review/interpret fallout history curves and predictions. Advise on and coordinate state decontamination activities. Reconstitute State Government in Lansing, if possible, or continue to operate from the ASG or other designated location. Provide Essential Functions from normal work locations, if possible, or from AOFs. Implement other continuity measures (e.g., emergency orders, directives, rules, and regulations; emergency succession of key officials; protection of vital records and resources; etc.) as required to provide for the continuation of Constitutional governance and provision of Essential Functions. Determine and prioritize resource needs and coordinate the redistribution of resources. Implement control and rationing of essential goods and supplies. As necessary, request assistance from adjacent states and/or the federal government. Issue public information on a regular basis. Inspect and sample food/feed supplies to prevent contamination from radioactive fallout. Issue agricultural advisories and protective action guides to prevent contamination from radioactive fallout. Coordinate post-attack food redistribution efforts. Ensure equal access to disaster-related services. Coordinate post-attack energy resource distribution. Coordinate post-attack petroleum and natural gas pipeline safety activities. Coordinate the investigation and control of communicable disease. Coordinate victim identification and mass fatality management services. Coordinate crisis counseling services with CMHSPs. Coordinate appropriate medical services. Coordinate food and environmental testing services. Provide post-attack monitoring, sampling, and analysis to minimize risks from radiological exposure. Coordinate state field team radiological assessment and control activities. Assist in screening populations exposed to radiological contamination. Coordinate decontamination of state facilities. Implement Michigan Emergency Highway Traffic Regulation Plan.	MSP/EMHSD, DTMB MSP/EMHSD, selected agencies MSP/EMHSD MSP/EMHSD, DTMB, MDOT MSP/EMHSD, Governor's Office, all Executive Branch agencies, Michigan Judiciary, Michigan Legislature MSP/EMHSD, selected agencies MSP/EMHSD, Governor's Office MSP/EMHSD, Governor's Office MSP/EMHSD, Governor's Office, JIT MDARD, EGLE MDARD MDARD MDCR MDLARA/MPSC MDLARA/MPSC MDHHS-Health MDHHS-Health, MSP MDHHS-Health MDHHS-Health MDHHS-Health EGLE EGLE EGLE DTMB MSP, MDOT

NUCLEAR POWER PLANT INCIDENT – TECHNOLOGICAL DISASTER

NOTE: In the 2022 update of the MEMP, the Nuclear Power Plant Incident annex is not being updated due the recent (December 2021) updating of Radiological Emergency Preparedness requirements from the federal government. The tasks, descriptions, and other information in this annex are directly repeated from the 2018 version of the MEMP.

General Response Procedures for a Nuclear Incident. Response to a nuclear power plant incident in Michigan is the joint responsibility of the plant owner/operator, and federal, state, and local governments. In the event of an incident at a Michigan nuclear power plant, the plant owner/operator will notify federal, state, and local government and classify the incident according to the "Nuclear Incident Emergency Action Level Classification System" (see separate table with same title). The Governor, with advice from the MSP/EMHSD and various other state departments/agencies, will determine the severity of the incident and may, if appropriate, declare a "state of disaster" or "state of emergency" pursuant to the Michigan Emergency Management Act. Based on the information provided by the owner/operator, the Nuclear Regulatory Commission (NRC), the MSP/EMHSD and state response departments/agencies, the Governor will make appropriate protective action orders based on these recommendations and the situational circumstances.

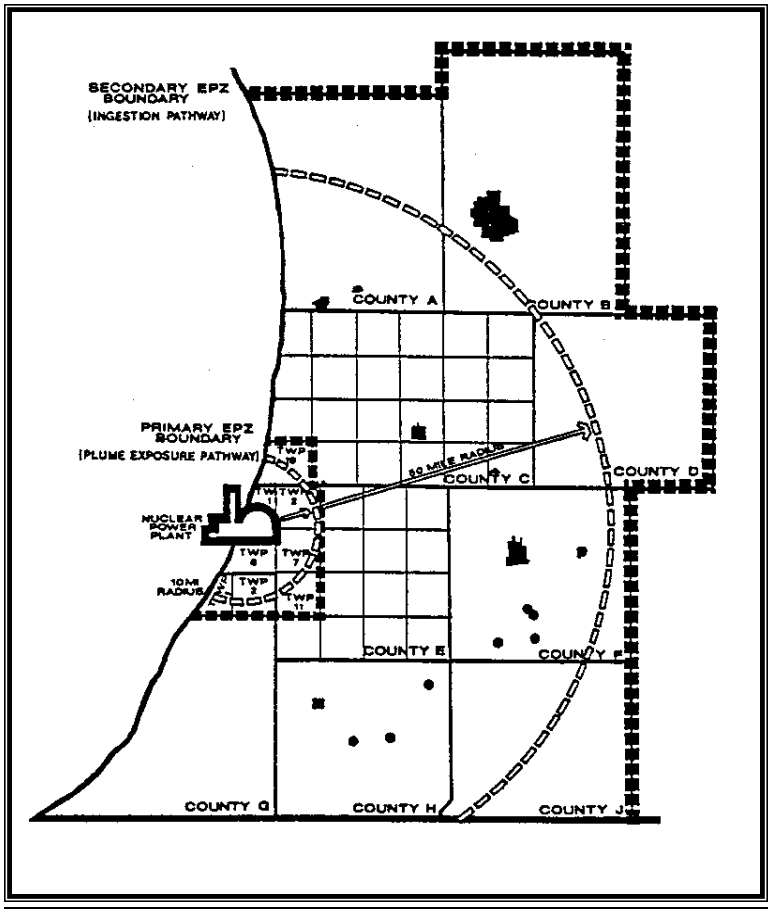
The response and recovery aspects of the MEMP and the EOPs of affected local governments will be activated. The State and affected local government have responsibility for those functions described in the "Nuclear Incident Agency Assignment and Function Chart". The State and local governments will implement protective action orders of the Governor and other preparedness and response activities based on the Nuclear Incident Emergency Action Level Classification System. FEMA provides guidance for the preparation of radiological response plans in the FEMA document NUREG 0654, FEMA REP-1. This document contains the criteria used as the basis for development of radiological emergency response plans for off-site response to a nuclear power plant incident.

The plant owner/operator and local, state, and federal government will work together in a joint, cooperative effort to prepare for and respond to a nuclear power plant incident. Each organization will define its role, prepare plans, train staff, and conduct exercises in advance to ensure that it will be able to coordinate all activities with other organizations and respond effectively if an incident occurs. Refer to the "Nuclear Incident Response Organization" for additional information on the nuclear incident roles and responsibilities of each organization.

Concept of Emergency Planning Zones. The Emergency Planning Zone (EPZ) is that area around a nuclear power plant for which planning is required to assure that prompt and effective actions will be taken to protect the public in the event of a nuclear incident. The "Primary EPZ" (based on the plume exposure pathway) consists of all townships, cities, and villages within a 10-mile radius of the plant. Within this zone, plans are developed that consider actions to protect the public, such as in-place sheltering and evacuation. This necessitates the maintenance and use of a public warning system, identification of evacuation routes and access control points, provisions for decontamination of the public, and provisions for public congregate care facilities. A "Secondary EPZ" (based on the ingestion exposure pathway) consists of all counties within a 50-mile radius of the plant. This zone exists for planning considerations that prevent the introduction of contamination into the human food chain, which also includes animal feed and water. The SDEMHS is responsible for response actions in the 50-mile Secondary EPZ.

Each nuclear power plant within the state is responsible for providing an Evacuation Time Estimate Study (ETE) to allow for the quickest and safest route to evacuate the 10-mile EPZ. Alternate routes are examined and may be relied upon when other factors that might hinder timely and safe evacuation occur. More detailed information and maps are found in local plans whose municipal boundaries fall inside the 10-mile EPZ.

Primary and Secondary Emergency Planning Zones



Emergency Planning Zones in Michigan. The following jurisdictions are part of an EPZ for one of Michigan's nuclear power plants, or the Davis-Besse Nuclear Power Station in Ohio (which affects portions of Michigan):

DONALD C. COOK NUCLEAR POWER PLANT

<u>The Primary EPZ consists of the following municipalities</u>:
Berrien County – Baroda Township, Baroda Village, Benton Harbor City, Benton Township, Bridgman City, Buchanan City, Buchanan Township, Chikaming Township, Lake Township, Lincoln Township, Stevensville Village, Oronoko Township, Berrien Springs Village, Royalton Township, St. Joseph City, St. Joseph Township, Shoreham Village, Sodus Township, Weesaw Township.

<u>The Secondary EPZ consists of the following Michigan counties</u>:
Allegan County, Cass County, Berrien County, Kalamazoo County, St. Joseph County, Van Buren County.

<u>The Secondary EPZ also consists of the following Indiana counties</u>:
Elkhart County, Kosciusko County, Lake County, Laporte County, Marshall County, Porter County, St. Joseph County, Starke County.

ENRICO FERMI NUCLEAR POWER PLANT

<u>The Primary EPZ consists of the following municipalities</u>:
Monroe County – Ash Township, Carleton Village, Berlin Township, Estral Beach Village, Exeter Township, South Rockwood Village, Frenchtown Township, Monroe City, Monroe Township, Raisinville Township.

Wayne County – Brownstown Township, Gibraltar City, Flat Rock City, Rockwood City.

<u>The Secondary EPZ consists of the following Michigan counties</u>:

Lenawee County, Livingston County, Macomb County, Monroe County, Oakland County, Washtenaw County, Wayne County.

The Secondary EPZ consists of the following Ohio counties:
Erie County, Fulton County, Lucas County, Ottawa County, Sandusky County, Wood County.

The Secondary EPZ consists of the following Canadian counties:
County of Essex.

PALISADES NUCLEAR POWER PLANT

The Primary EPZ consists of the following municipalities:
Van Buren County – Bangor City, Bangor Township, Covert Township, Geneva Township, Hartford City, Hartford Township, South Haven City, South Haven Township.

Allegan County – Casco Township.

Berrien County – Coloma City, Coloma Township, Hagar Township, Watervliet Township, Watervliet Village.

The Secondary EPZ consists of the following Michigan counties:
Allegan County, Barry County, Berrien County, Cass County, Kalamazoo County, Kent County, Ottawa County, St. Joseph County, Van Buren County.

The Secondary EPZ consists of the following Indiana counties:
Elkhart County, Laporte County, St. Joseph County.

DAVIS-BESSE NUCLEAR POWER STATION (OHIO)

The Primary EPZ consists of the following municipalities in Michigan:
None in Michigan.

The Secondary EPZ consists of the following Michigan counties:
Lenawee County, Monroe County, Washtenaw County, Wayne County.

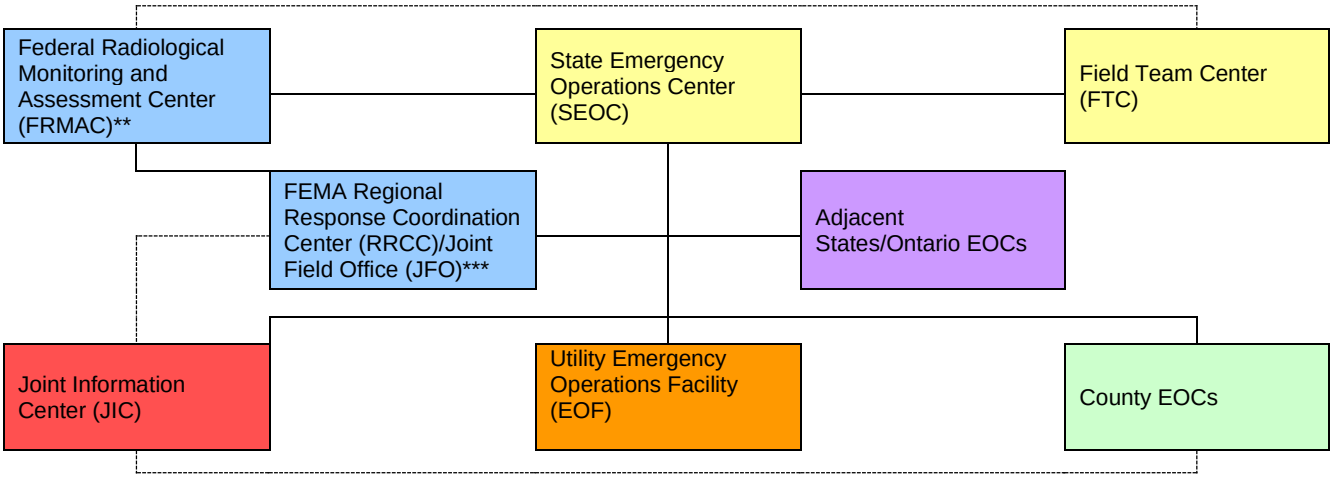
Emergency Operations/Coordination Centers. In the event of a nuclear incident, the SEOC in Lansing will be activated. (Refer to the Direction and Control ESF.) In addition, Field Team Center (FTC) will be established for dispatch and coordination of radiological field monitoring teams. (See the section titled “Field Team Center”) A JIC will be established which consists of representatives from local, state, and federal government, and the utility. (See the section titled “Joint Information Center”, as well as the Information and Planning ESF.) The MSP/EMHSD will dispatch liaisons to Primary EPZ county EOCs to ensure coordination of operations and activities.

Federal Government Facilities. The federal government will also establish facilities to monitor and coordinate the situation. FEMA will normally establish a Joint Field Office (JFO) within the state to coordinate federal and state damage survey teams and initial disaster assistance processing activities. FEMA will also establish a Regional Response Coordination Center (RRCC) in Chicago, Illinois to coordinate federal response activities until the JFO is established locally. (Refer to the “Emergency Management System” section and Direction and Control ESF for more information on these facilities.) The NRC will establish a Federal Radiological Monitoring and Assessment Center (FRMAC) to serve as a coordination center for monitoring and sampling of the environment. (When the FRMAC is established, the FTC will normally be incorporated into that facility.)

Space will be provided to accommodate a federal response. The SEOC located in Lansing, will be the primary office space available where federal staff will have access to computers, telephones, and 800 MHz radios. Federal staff will also have access to the designated FTC to set up a FRMAC. There are several airports that can be utilized to bring in resources if needed. Lansing Capital Regional International Airport located in Lansing and the Gerald R. Ford International Airport located in Grand Rapids are designated if federal personnel are needed at the SEOC.

*Note: The time that it takes for the Federal Government to respond, is dependent on that specific agency and resources being requested.

Emergency Operations / Coordination Center Interrelationships*



FACILITY	STAFFED BY	DIRECT OPERATIONAL LINKAGE WITH	KEY COORDINATION LINKAGE WITH
State Emergency Operations Center (SEOC)	State ESFs; Governor's Representative; Utility; Health Physicist; Federal Liaisons	All facilities	All facilities
Field Team Center (FTC)	State Radiological Monitoring Teams; Team Leaders and Coordinator	SEOC	FRMAC
FEMA Regional Response Coordination Center (RRCC)/Joint Field Office (JFO)***	Nuclear Regulatory Commission; FEMA and Other Federal Response Agencies	SEOC; FRMAC; Adjacent States/Ontario EOCs	JIC
Federal Radiological Monitoring and Assessment Center (FRMAC)**	Federal Radiological Monitoring Teams; State Liaison	SEOC; RRCC/JFO	FTC
Joint Information Center (JIC)	Local, State, Federal and Utility PIOs	SEOC	RRCC/JFO; County EOCs
Utility Emergency Operations Facility (EOF)	Owner/Operator; Nuclear Regulatory Commission Liaison	SEOC	None
County EOCs	Local Officials; MSP/EMHSD District Coordinator; Utility Liaison	SEOC	JIC
Adjacent States/Ontario EOCs	State/Provincial Officials	SEOC; RRCC/JFO	None

*For an incident which results in disaster/emergency declarations at both the state level (under 1976 PA 390) and federal level (Stafford Act).
**When the FRMAC is opened, the FTC will normally be incorporated into that facility.
***The RRCC coordinates regional response efforts and implements federal program support until a JFO is established locally.
(Dashed lines ---- indicate key coordination linkages.)

Field Team Center. When a nuclear incident occurs, the MSP/EMHSD will establish an FTC near the plant and assign an FTC Administrator to open, direct and administer the operations of the facility. The MSP/EMHSD will contact the EGLE/Waste Management and Radiological Protection Division (EGLE/WMRPD), which will assign a trained health physicist to serve as the FTC Coordinator (FTCC). EGLE Health Physics Support (HPS) staff will utilize computer spreadsheets and models to analyze field data, plant data, and laboratory analyses to provide protective action guidelines and dose projections to the SEOC. Decontamination workers and support staff will be dispatched, as necessary, to the FTC Worker Decontamination Center (WDC) to perform personnel/vehicle decontamination and sample collection, packaging, and transport. Decontamination staff and other staff may also aid in the response to county facilities as requested by the SEOC.

Health Physics Response Teams. HPRTs (commonly called "field teams") and support staff will be dispatched as necessary to the vicinity of the affected nuclear power plant to perform radiological monitoring, collect environmental samples, perform other radiological activities as needed, and report their findings to the FTC. The HPRTs are typically composed of EGLE and MDLARA staff. The FTCC will coordinate the HPRTs via 800 MHz radios. Samples collected by the HPRTs will be transported to the EGLE Radiological Protection Laboratory (RPL) in Lansing for analysis.

Federal Radiological Monitoring and Assessment Center. When federal authorities open the FRMAC, the state FTC, at the discretion of state officials, may be incorporated into the FRMAC. The FRMAC serves as a coordination center from which the monitoring and sampling of the environment is directed. This monitoring and sampling, which includes air, soil, water, vegetation, milk, meat, crops, and grain, is done to detect and measure the presence of radiation levels above what is deemed normal.

Information Transmittal. The MSP liaison at the FTC or FRMAC will transmit collected/compiled information to the SEOC to aid the Governor and SEOC staff in determining appropriate protective actions to protect public health and safety.

Nuclear Incident Response Organization

Response Organization/Emergency Functions	Support Provided To	State Response Agencies/Emergency Functions
PRIMARY FEDERAL RESPONSE AGENCIES Federal Emergency Management Agency Nuclear Regulatory Commission Department of Energy EMERGENCY FUNCTIONS Federal Coordination Resource Support Technical Advice	→	PRIMARY STATE RESPONSE AGENCIES STATE POLICE (MSP) Direction, Control and Coordination Evacuation Authority Warning/Notification Security Damage Assessment Public Information In-Place Shelter Local Plans Terrorist Activities Federal Liaison ENVIRONMENT GREAT LAKES, ENERGY (EGLE) Monitoring/Sampling Technical Advice Emergency Worker Protective Actions Occupational Health Emergency Worker Dose Assessment Radiological Exposure Control Decontamination Advice Accident/Dose Assessment
SITE EMERGENCY ORGANIZATION EMERGENCY FUNCTIONS Notification On-Site Control LOCAL RESPONSE AGENCIES Public Works Law Enforcement Human Services Health Services Fire Services EMERGENCY FUNCTIONS Warning Evacuation Sheltering Barricading Public Information Reentry	→ ←	SUPPORT STATE RESPONSE AGENCIES AGRICULTURE AND RURAL DEVELOPMENT (MDARD) Food Contamination Food Supply Sampling CORRECTIONS (MDOC) Temporary Housing Transportation Assistance Feeding and Clothing Support HEALTH AND HUMAN SERVICES-HEALTH (MDHHS) Emergency Worker Medical and Health Support Crisis Counseling Temporary Housing EDUCATION (MDE) Housing Mass Transportation HUMAN SERVICES (MDHHS-Human Services) Housing/Registration Feeding and Clothing Assistance Centers Volunteer Agency Support LICENSING AND REGULATORY AFFAIRS (MDLARA) Public Utilities Liaison Energy Disruption MILITARY AND VETERANS AFFAIRS (MDMVA) Transportation Security Aerial and Ground Monitoring Support NATURAL RESOURCES (MDNR) Environmental Impact Meteorological Analysis Fish and Game Contamination Sampling Warning Support OFFICE OF SERVICES TO THE AGING (MOSA) Needs of Senior Population TRANSPORTATION (MDOT) Transportation Traffic Regulations Barricade

Nuclear Facility Locations

PLANT	PALISADES Entergy Nuclear, Inc. 27780 Blue Star Highway Covert MI 49043	ENRICO FERMI 2 DTE Energy 6400 N. Dixie Highway Newport MI 48166	D. C. COOK American Electric Power 1 Cook Place Bridgman MI 49106
TYPE AND CAPACITY	PWR 805 MW	BWR 1093 MW	Unit 1 – PWR 1050 MW Unit 2P – WR 1100 MW
EMERGENCY OPERATION FACILITY (EOF)	EOF/JIC Palisades 330 West Main Suite 102 (East) Benton Harbor MI 49002	Nuclear Operation Center 6400 N. Dixie Highway Newport MI 48166	Cook Nuclear Plant EOF 500 Circle Drive Buchanan MI 49107
INITIAL NOTIFICATION POINT	MSP – Operations MSP Headquarters 7150 Harris Drive Dimondale, MI 48821	MSP – Operations MSP Headquarters 7150 Harris Drive Dimondale, MI 48821	MSP – Operations MSP Headquarters 7150 Harris Drive Dimondale, MI 48821
STATE EMERGENCY OPERATIONS CENTER (SEOC)	MSP – EMHSD MSP Headquarters 7150 Harris Drive Dimondale, MI 48821	MSP – EMHSD MSP Headquarters 7150 Harris Drive Dimondale, MI 48821	MSP – EMHSD MSP Headquarters 7150 Harris Drive Dimondale, MI 48821
FIELD TEAM CENTER (FTC)	MDOT Coloma Maintenance Garage 3880 Red Arrow Highway Coloma MI 49038	Monroe MSP Post 300 Jones Avenue Monroe MI 48161	MDOT Coloma Maintenance Garage 3880 Red Arrow Highway Coloma MI 49038
JOINT INFORMATION CENTER (JIC)	EOF/JIC Palisades 330 West Main Suite 102 (East) Benton Harbor MI 49002	Monroe Community College 1555 S. Raisinville Road Monroe MI 48161	AEP Nuclear Generation Headquarters 500 Circle Drive Buchanan MI 49107
LOCAL EMERGENCY OPERATIONS CENTER (EOC)	Van Buren County Sheriff Department 205 S. Kalamazoo Street Paw Paw MI 49079 Allegan County Emergency Management 3271 122nd Avenue Allegan MI 49010 Berrien County 2100 Complex 2100 E. Empire Avenue Benton Harbor, MI 49022	Monroe County Emergency Management 987 S. Raisinville Road Monroe MI 48161 Wayne County Emergency Operations Center 33030 Van Born Rd. Wayne, MI 48184	Berrien County 2100 Complex 2100 E. Empire Avenue Benton Harbor, MI 49022

Scenario for a Nuclear Incident Response
(Approximate sequence of events)

NUCLEAR INCIDENT AT MICHIGAN NUCLEAR POWER PLANT

Situation at plant meets the accident definition guidelines prescribed in the "Nuclear Incident Emergency Action Level Classification System" per NUREG-0654/FEMA-REP-1.

▼

PLANT OWNER/OPERATOR

Responds to and initially classifies accident.
Activates Site Emergency Plan.
Notifies affected county sheriff office, MSP Operations, Nuclear Regulatory Commission, and other agencies as designated in Site Emergency Plan.

▼

AFFECTED COUNTY SHERIFF OFFICE

Notifies local EMC and other local officials/agencies as appropriate.

▼

LOCAL CHIEF EXECUTIVE/EMERGENCY MANAGEMENT COORDINATOR

Activates local EOC.
Activates response and recovery aspects of county EOP.
Declares a local "state of emergency" under 1976 PA 390, as amended.
If appropriate, requests a state emergency or disaster declaration by the Governor.

▼

MSP OPERATIONS

Notifies nearest MSP Post, applicable MSP District Headquarters, Ontario Provincial Emergency Operations Centre, other states and MSP/EMHSD.

▼

MSP/EMHSD

Notifies Governor's Office, applicable state departments/agencies, FEMA, and other applicable federal departments/agencies, and affected local governments not notified by the owner/operator.
Initiates immediate public warning as applicable (if classified as "General Emergency").
Activates SEOC and response/recovery aspects of MEMP.
Activates other emergency operations/coordination facilities as appropriate (e.g., FTC, JIC, SCP).
Assesses situation with local, state, and federal departments/agencies and owner/operator.

▼

GOVERNOR

May declare disaster or emergency under 1976 PA 390.
May activate MEMAC/EMAC if appropriate.
May request federal disaster relief assistance, if warranted, through FEMA Region V in Chicago, Illinois.

▼

MICHIGAN STATE DEPARTMENTS/AGENCIES

Implements appropriate response and recovery tasks per MEMP task assignments.

▼

INCIDENT ABATED

Affected county coordinates reentry into evacuated area with MSP/EMHSD (once release is stopped, situation is stabilized, and Governor authorizes reentry).
State departments/agencies coordinate reentry activities with MSP/EMHSD and performs appropriate monitoring, sampling, analysis, and cleanup tasks to facilitate long-term recovery and contamination control.
Affected local jurisdictions may seek public cost recovery through 1976 PA 390/Section 19 (if federal relief assistance for public agency costs was not activated or costs are not covered under the Price-Anderson Act).

Nuclear Incident Agency Assignment and Function Chart

ASSIGNED DEPARTMENT / AGENCY P = Primary S = Support FUNCTION	MDARD	MDLARA	MDOC	MDE	EXECUTIVE (GOVERNOR)	EGLE	MDIFS	MDMVA	MDNR	MDHHS-Health	MDHHS-Human Services	MSP	MDOT
Access Control												P	S
Accident / Dose Assessment						P						S	
Alerting												P	
Classification of Incident						S						S	
Clothing, Provision of			S							S	P		
Communications						S		S	S			P	S
Crisis Counseling										P	S		
Damage Assessment												P	
Decontamination Guidance						P							
Direction and Control					P							S	
Dosimetry						P						S	
Emergency Medical Service										P			
Evacuation Authority					P							S	
Exposure Control						P							
Fire									P			S	
Food	S		S	S				S		S	P		
Heavy Rescue													P
Housing				S				S		S	P		
Insurance Claims							P						
Law Enforcement									S			P	
Liaison to County												P	
Liaison to Federal												P	
Liaison to Utility		S										P	
Meteorological Analysis	P												
Monitoring		S				P							
Notification												P	
Planning												P	
Public Health						S				P			
Public Information						S						P	
Radio-Protective Drug Guidance						S				P			
Reentry Authority					P							S	
Sampling	S					P			S				
Sanitation										P			
Social Services											P		
Traffic Control												P	S
Training / Exercise												P	
Transportation, Public			S	P				S		S			S
Waste Removal						P							

Nuclear Incident Emergency Action Level Classification System*

Classification	Description	Purposes
NOTIFICATION OF UNUSUAL EVENT	Unusual events are in process or have occurred that indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.	Bring the operating staff to a state of readiness. Provide systematic handling of unusual events information and decision making.
ALERT	Events are in process or have occurred that involve an actual or potential substantial degradation of the level of safety of the plant. Any releases expected to be limited to small fractions of the EPZ Protective Action Guideline exposure levels.	Assure that emergency personnel are readily available to respond if situations become more serious or to perform confirmatory radiation monitoring if required. Provide offsite authorities current status information.
SITE AREA EMERGENCY	Events are in process or have occurred that involve actual or likely major failures of plant functions needed for protection of the public. Any releases not expected to exceed EPZ Protective Action Guideline exposure levels except near site boundary.	Assure that response centers are manned. Assure that monitoring teams are dispatched. Assure that personnel required for evacuation of near-site areas are at duty stations if situation becomes more serious. Provide consultation with offsite authorities. Provide updates for the public through offsite authorities.
GENERAL EMERGENCY	Events are in process or have occurred that involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity. Releases can be reasonably expected to exceed EPZ Protective Action Guideline exposure levels offsite for more than the immediate site area.	Initiate predetermined protective actions for the public. Provide continuous assessment of information from licensee and offsite organization measurements. Initiate additional measures as indicated by actual or potential releases. Provide consultation with offsite authorities.

*Extracted from NUREG-0654/FEMA-REP-1, dated October 1980

State and/or Local Offsite Authority Actions*

Classification	Actions
NOTIFICATION OF UNUSUAL EVENT	Provide fire or security assistance if requested. Escalate to a more severe classification, if appropriate. Stand by until verbal closeout.
ALERT	Provide fire or security assistance if requested. Augment resources and bring primary response centers and EAS to standby status. Alert to standby status key emergency personnel including monitoring teams and associated communications. Provide confirmatory offsite radiation monitoring and ingestion pathway dose projections if actual releases substantially exceed technical specification limits. Escalate to a more severe classification, if appropriate. Maintain “Alert” status until verbal closeout.
SITE AREA EMERGENCY	Provide any assistance requested. If sheltering near the site is desirable, activate public notification system within at least two miles of the plant. Provide public within at least about 10 miles periodic updates on “Site Area Emergency” status. Augment resources by activating primary response centers. Dispatch key emergency personnel including monitoring teams and associated communications. Alert to standby status other emergency personnel (e.g., those needed for evacuation) and dispatch personnel to near-site duty stations. Provide offsite monitoring results to licensee, DOE, and others and jointly assess them. Continuously assess information from licensee and offsite monitoring with regard to changes to protective actions already initiated for public and mobilizing evacuation resources. Recommend placing milk animals within two miles on stored feed and assess need to extend distance. Provide press briefings, perhaps with licensee. Escalate to “General Emergency” classification, if appropriate. Maintain “Site Area Emergency” status until closeout.
GENERAL EMERGENCY	Provide any assistance requested. Activate immediate public notifications of “General Emergency” status and provide public periodic updates. Recommend sheltering for two-mile radius and five-mile downwind and assess need to extend distances. Consider advisability of evacuation (projected time available vs. estimated evacuation times). Augment resources by activating primary response centers. Dispatch key emergency personnel including monitoring teams and associated communications. Dispatch other emergency personnel to duty stations within 5-mile radius and alert all others to standby status. Provide offsite monitoring results to licensee, DOE, and others and jointly assess them. Continuously assess information from licensee and offsite monitoring with regard to changes to protective actions already initiated for public and mobilizing evacuation resources. Recommend placing milk animals within 10 miles on stored feed and assess need to extend distance. Provide press briefings, perhaps with licensee. Maintain “General Emergency” status until closeout.

*Extracted from NUREG-0654/FEMA-REP 1, dated October l980

Licensee Actions*

Classification	Actions
NOTIFICATION OF UNUSUAL EVENT	Promptly inform state and/or local offsite authorities of nature of unusual condition as soon as discovered. Augment on-shift resources, as needed. Assess and respond. Escalate to a more severe classification, if appropriate. Close out with verbal summary to offsite authorities, followed by written summary within 24 hours.
ALERT	Promptly inform state and/or local authorities of “Alert” status and reason for alert as soon as discovered. Augment resources and activate onsite technical support center and operational support center. Assess and respond. Dispatch onsite monitoring teams/associated communications. Provide periodic plant status updates to offsite authorities (at least every 15 minutes). Provide periodic meteorological assessments to offsite authorities and, if any releases are occurring, dose estimates for actual releases. Escalate to a more severe classification, if appropriate. Close out or recommend reduction in emergency classification by verbal summary to offsite authorities, followed by written summary within eight hours of closeout.
SITE AREA EMERGENCY	Promptly inform state and/or local offsite authorities of “Site Area Emergency” status and reason for emergency as soon as discovered. Augment resources by activating onsite technical support center and operational support center, and near-site EOF. Assess and respond. Dispatch onsite and offsite monitoring teams and associated communications. Dedicate an individual for plant status updates to offsite authorities and periodic press briefings (perhaps joint with offsite authorities). Make senior technical and management staff onsite available for consultation with NRC and State on a periodic basis. Provide meteorological and dose estimates to offsite authorities for actual releases via a dedicated individual or automated data transmission. Provide release and dose projections based on available plant condition information and foreseeable contingencies. Escalate to “General Emergency” classification, if appropriate. Close out or recommend reduction in emergency classification by briefing of offsite authorities at EOF and by phone, followed by written summary within eight hours of closeout.
GENERAL EMERGENCY	Promptly inform state and local offsite authorities of “General Emergency” status and reason for emergency as soon as discovered (parallel notification of state/local). Augment resources by activating onsite technical support center and operational support center, and near-site EOF. Assess and respond. Dispatch onsite and offsite monitoring teams and associated communications. Dedicate an individual for plant status updates to offsite authorities and periodic press briefings (perhaps joint with offsite authorities). Make senior technical and management staff onsite available for consultation with NRC and State on a periodic basis. Provide meteorological and dose estimates to offsite authorities for actual releases via a dedicated individual or automated data transmission. Provide release and dose projections based on available plant condition information and foreseeable contingencies. Close out or recommend reduction of emergency classification by briefing of offsite authorities at EOF and by phone, followed by written summary within eight hours of closeout.

*Extracted from NUREG-0654/FEMA-REP 1, dated October l980

Warning and Communications for a Nuclear Incident.

State Notification System. When a nuclear incident occurs, certain federal, state, and local offsite authorities must be notified so that necessary actions may be taken expeditiously. The plant owner/operator is required to classify the incident and to provide information to offsite authorities. These agencies include: 1) MSP Operations in Dimondale; 2) the sheriff or other designated authorities in the Primary EPZ as indicated in the local EOPs; 3) the NRC; and 4) others as designated in the owner/operator's Site Emergency Plan.

Twenty-four-hour communications capability exists between each of the nuclear power plants and the MSP for alerting and security purposes. An Operation's Section Commander manages the communication center, and a shift schedule is maintained and updated monthly to ensure Twenty-four-hour, seven day a week coverage. The primary communications link is via commercial telephone between the plant control room and MSP Operations in Dimondale. The alternate communications link is via MSP radio between the plant control room and the nearest MSP Post, which will relay to MSP Operations via the best available communication means for continued state notification. These links are staffed on a 24-hour per day basis and are tested on a monthly basis.

These means and procedures of initial notification are utilized until the SEOC is activated; at which time it will function as the entry point for updated information. The plant owner/operator is required to provide the following information to the SEOC:

<u>Nuclear Incident Message Content</u>

- Location of incident and name and telephone number (of communications channel identification) of caller.
- Date/time of incident.
- Class of emergency.
- Type of actual or projected release and estimated duration/impact times.
- Estimate of quantity of radioactive material released or being released and the height of release.
- Chemical and physical form of released material, including estimates of the relative quantities and concentration of noble gases, iodine, and particulates.
- Prevailing weather conditions.
- Actual or projected dose rates and affected areas.
- Recommended emergency actions, including protective measures.
- Request for any needed onsite support by offsite organizations.
- Prognosis for worsening or termination of event based on plant information.

Each department/agency notified by the MSP or local government has the responsibility to extend notification to other personnel as deemed necessary or as directed by the notifying point.

Public Warning System. Each plant site has a prompt notification system within the Primary EPZ such that the resident and transient population is capable of being notified within the 15-minute design objective. Local governments within the Primary EPZ have direct hotline communication to the plant as described in local EOPs. Backup communications generally consist of law enforcement radio. All local warning entry points identified for this purpose are operational on a 24-hour per day basis. These lines are also tested at least monthly.

Activation of this system is a local responsibility. Local warning is initiated only by the properly authorized local official as identified in local EOPs. The prompt notification system is also complemented by special warning devices installed in schools, hospitals, and other special institutions, and in high-noise areas. The Emergency Alert System (EAS) is also considered a component of the prompt notification system and is activated locally. Appropriate information contained in initial and follow-up messages received from the plant owner/operator is disseminated through this system. The JIT may provide instructions and information to the public to complement the warning. (Refer to local EOPs for the administrative and physical means and the time required for notifying and providing prompt instructions to the public.)

SEOC Communications for Nuclear Incidents. The DTMB is responsible for providing and coordinating a communications capability for the SEOC, as described in the Warning and Communications ESF. Communications systems for direction and control include radio, the MI CIMS, and hotline/regular telephone and are used to transmit information from the SEOC to department/agencies and local governments in the Primary and Secondary EPZ. Dedicated open telephone lines are utilized between key points to assure continuously available, uninterrupted communication. The DTMB arranges for the installation of telephones or other special features such as line load control. The MSP/EMHSD determines the appropriate links to be established and provides personnel to staff these links. As necessary, MSP Operations may be requested to provide personnel to staff communications links in a support capacity.

Additional SEOC radio communications capability can be provided by the MDOT and MDNR, amateur radio, and the Civil Air Patrol. MSP Operations, in cooperation with the MSP/EMHSD, coordinates the use of this additional equipment and assures its proper interface. MSP Operations also coordinates the use of frequencies, including the designation of emergency frequencies and the restriction of traffic on certain frequencies.

Critical Nuclear Incident Warning/Communications Preparedness Actions

MSP/EMHSD:
Conduct regular communications tests and drills. Communications between state and local emergency response organizations exist on a continuous basis and are therefore tested at least monthly, as required. Communications with federal response agencies and states within the ingestion pathway are also continuous and are tested at least quarterly. Communications between the plant, state and local EOCs, and radiological emergency response teams are tested annually* at the time of the required exercises. This includes the aspect of understanding the content of the messages. Due to the nature of the established communications links, equipment is inspected, inventoried, and operationally checked on a continuous basis; therefore, it is done at least quarterly as required. There are sufficient reserves of equipment to replace of which is removed for repair.
*Note: Exercises with each individual plant are required on a biennial basis; however, the MSP/EMHSD participates in at least one plant exercise per year, and in some years participates in two exercises.

Critical Nuclear Incident Warning/Communications Response Actions

MICHIGAN STATE POLICE (MSP):

Provide initial notification of a nuclear incident to key departments / agencies. Upon notification from the plant owner/operator that a nuclear incident has occurred, MSP Operations will immediately notify the following:

- The MSP Post nearest the plant.
- The applicable MSP District Headquarters.
- The MSP/EMHSD.
- The Ontario Provincial Emergency Operations Centre (for the Enrico Fermi 2 plant).
- Other states.

MSP/EMHSD:
Provide additional notifications to key departments/agencies. Upon being notified by MSP Operations that a nuclear incident has occurred, the MSP/EMHSD will immediately notify the following:

- The Governor's Office, via the designated emergency management point of contact.
- EGLE (state radiological control agency, by statute).
- Other state departments/agencies deemed necessary to the situation, via the designated EMC or Director.
- FEMA, via the designated duty officer.
- Other appropriate federal departments/agencies, via the designated emergency contact.
- Adjacent states (Indiana and Ohio), via their SEOC or, alternately, via LEIN to the Indiana State Police and Ohio State Patrol.
- Affected local governments, via telephone or LEIN to the 24-hour link with the Sheriff Department.

Note: This notification may be secondary for local governments that were notified directly by the plant owner / operator, or primary for other local governments within the Primary or Secondary EPZs.

- Appropriate NGO partners (e.g., ARC, MIVOAD).

Provide for verification of messages through call-back procedure or by virtue of closed communications systems.

Initiate immediate public warning as applicable. If the plant owner/operator classifies the incident as a "General Emergency" based upon actual or imminent substantial core degradation or melting with the potential for loss of containment, the MSP/EMHSD will initiate immediate public warning. Immediate public warning takes into consideration the following actions:

Affected local governments will be notified to alert the general public to move indoors and close windows and doors until further instructions are issued.

Initial evacuation areas of approximately a two-mile radius in all sectors and approximately five miles in affected downwind sectors will be recommended; this may be extended by proper assessment.

Activate supplemental warning assets as required. If necessary, the MSP/EMHSD will request the MSP, MDMVA, and MDNR to provide personnel and vehicles to assist local governments in warning (via loudspeaker and/or direct contact) the public of a nuclear incident.

Establish SEOC communications links. Upon activation of the SEOC for a nuclear incident, the MSP/EMHSD is responsible for establishing the following communications links:

With Plant Owner/Operator. Dedicated telephone lines are the primary means of communication with an alternate means available via radio communication through the MSP Post nearest the plant. Upon establishment of this dedicated line by the SEOC, the plant will be instructed to terminate any direct communication with the affected county/counties, the MSP Post, and MSP Operations.

With Affected Local Emergency Management Program Jurisdictions. LEIN, MI CIMS, or regular telephone lines are the primary means of communication. Dedicated telephone lines will be maintained with those EOCs activated within the Primary EPZ for priority policy messages and confirmation. Hardcopy messages will be sent via facsimile, MI CIMS, or LEIN.

With State Departments/Agencies. Regular telephone lines and MI CIMS are the primary means of communication, with some radio backup capability as an alternate means.

With NRC. Telephone, facsimile, or computer links (email) are the primary means of communication for the transmission and receipt of technical data, plant status data, release data, and protective action recommendations.

With FEMA. The Federal Telecommunications System (FTS) land lines and Federal National Message System (FNAMS) are the primary means of communication for the provision of information and to request assistance. The FEMA National Radio System (FNARS) or regular land line telephones serve as alternate means of communication.

With FTC. Dedicated telephone lines are the primary means of communication, with LEIN and facsimile providing hardcopy confirmation and an alternate means. DTMB/MPSCS radio will be utilized as an alternate means of communication if necessary.

With JIC. A dedicated telephone line is utilized as the primary means of communication for priority policy messages and confirmation. The MI CIMS is utilized to review and confirm time-sensitive information. Facsimile provides hardcopy confirmation and serves as an alternate means of communication. Cellular telephones are also available as an alternate means of communication.

With DOE. If technical assistance is required from the DOE, communications will be established via FTS land line, regular telephone line, or by relay through FEMA (as described above).

With Adjacent States and Ontario, Canada. Communications with Indiana or Ohio is via FTS land line, regular telephone line, LEIN, or FNAMS to the established emergency management office or SEOC. Communications with the Ontario Ministry of Community Safety and Correctional Services is via regular telephone line, with facsimile or FNAMS as alternate means.

<u>Example Initiating Conditions for Emergency Notifications</u>

EXAMPLE INITIATING CONDITIONS: NOTIFICATION OF UNUSUAL EVENT*

- Emergency Core Cooling System (ECCS) initiated discharge to vessel.
- Radiological effluent technical specification limits exceeded.
- Fuel damage indication. Examples:
    - High off gas at BWR air ejector monitor (greater than 500,000 uci/sec; corresponding to 16 isotopes decayed to 30 minutes; or an increase of 100,000 uci/sec within a 30-minute time period).
    - High coolant activity sample (e.g., exceeding coolant technical specifications for iodine spike).
    - Failed fuel monitor (PWR) indicates increase greater than 0.1% equivalent fuel failures within 30 minutes.
    - Abnormal coolant temperature and/or pressure or abnormal fuel temperatures outside of technical specification limits.
- Exceeding either primary/secondary leak rate technical specification or primary system leak rate technical specification.
- Failure of a safety or relief valve in a safety-related system to close following reduction of applicable pressure.
- Loss of off-site power or loss of on-site AC power capability.

- Loss of containment integrity requiring shutdown by technical specifications.
- Loss of engineered safety feature or fire protection system function requiring shutdown by technical specifications (e.g., because of malfunction, personnel error, or procedural inadequacy).
- Fire within the plant lasting more than ten minutes.
- Indications or alarms on process or effluent parameters not functional in control room to an extent requiring plant shutdown or other significant loss of assessment or communication capability (e.g., plant computer, Safety Parameter Display System, all meteorological instrumentation).
- Security threat or attempted entry or attempted sabotage.
- Natural phenomenon being experienced or projected beyond usual levels.
- Any earthquake felt in-plant or detected on station seismic instrumentation.
- 50-year floor or low water, tsunami, hurricane surge, seiche.
- Any tornado on-site.
- Any hurricane.
- Other hazards being experienced or projected.
- Aircraft crash on-site or unusual aircraft activity over facility.
- Train derailment on-site.
- Near or on-site explosion.
- Near or on-site toxic or flammable gas release.
- Turbine rotating component failure causing rapid plant shutdown.
- Other plant conditions exist that warrant increased awareness on the part of a plant operating staff or state and/or local off-site authorities or require plant shutdown under technical specification requirements or involve other than normal controlled shutdown (e.g., cool down rate exceeding technical specification limits, pipe cracking found during operation).
- Transportation of contaminated injured individual from site to off-site hospital.
- Rapid depressurization of PWR secondary side.

**Extracted from NUREG-0654, FEMA-REP-1, Rev. 1, dated November 1980.*

EXAMPLE INITIATING CONDITIONS: ALERT*

- Severe loss of fuel cladding.
- High off gas at BWR air ejector monitor (greater than 5 ci/sec; corresponding to 16 isotopes decayed 30 minutes).
- Very high coolant activity sample (e.g., 300 uci /cc equivalent of I-131).
- Failed fuel monitor (PWR) indicates increase greater than 1% fuel failures within 30 minutes or 5% total fuel failures.
- Rapid gross failure of one steam generator tube with loss of off-site power.
- Rapid failure of steam generator tubes (e.g., several hundred gpm primary to secondary leak rate).
- Steam line break with significant (e.g., greater than ten gpm) primary to secondary leak rate (PWR) or MSIV malfunction causing leakage (BWR).
- Primary coolant leak rate greater than 50 gpm.
- Radiation levels or airborne contamination which indicates a severe degradation in the control of radioactive materials (e.g., increase of factor of 1000 in direct radiation readings within facility).
- Loss of off-site power and loss of all on-site AC power (see Site Area Emergency for extended loss).
- Loss of all on-site DC power (see Site Area Emergency for extended loss).
- Coolant pump seizure leading to fuel failure.
- Complete loss of any function needed for plant cold shutdown.
- Failure of the reactor protection system to initiate and complete a scram which brings the reactor sub critical.
- Fuel damage accident with release of radioactivity to containment or fuel handling building.
- Fire potentially affecting safety systems.
- Most or all alarms (enunciators) lost.
- Radiological effluents greater than ten times technical specification instantaneous limits (an instantaneous rate which, if continued over two hours, would result in about one mr at the site boundary under average meteorological conditions).
- Ongoing security compromise.
- Severe natural phenomena being experienced or projected.
- Earthquake greater than OBE levels.
- Food, low water, tsunami, hurricane surge, seiche near design levels.
- Any tornado striking facility.
- Hurricane winds near design basis level.
- Other hazards being experienced or projected.

- Aircraft crash on facility.
- Missile impacts from whatever source on facility.
- Known explosion damage to facility affecting plant operation.
- Entry into facility environs of uncontrolled toxic or flammable gases.
- Turbine failure causing casing penetration.
- Other plant conditions exist that warrant precautionary activation of technical support center and placing near-site Emergency Operations Facility and other key emergency personnel on standby.
- Evacuation of control room anticipated or required with control of shutdown systems established from local stations.

**Extracted from NUREG-0654, FEMA REP-1, Rev. 1, dated November 1980.*

EXAMPLE INITIATING CONDITIONS: SITE AREA EMERGENCY*

- Known loss of coolant accident greater than makeup pump capacity.
- Degraded core with possible loss of cool-able geometry (indicators should include instrumentation to detect inadequate core containment radioactivity levels).
- Rapid failure of steam generator tubes (several hundred gpm leakage) with loss of off-site power.
- BWR steam line break outside containment without isolation.
- PWR steam line break with greater than 50 gpm primary to secondary leakage and indication of fuel damage.
- Loss of off-site power <u>and</u> loss of on-site AC power for more than 15 minutes.
- Loss of all vital on-site DC power for more than 15 minutes.
- Complete loss of any function needed for plant hot shutdown.
- Transient requiring operation of shutdown systems with failure to scram (continued power generation but no core damage immediately evident).
- Major damage to spent fuel in containment or fuel handling building (e.g., large object damages fuel or water loss below fuel level).
- Fire-compromising the functions of safety systems.
- Most or all alarms (enunciators) lost and plant transient initiated or in progress.
- Effluent monitors detect levels corresponding to greater than 50 mr/hr for one-half hour <u>or</u> greater than 500 mr/hr W.B. for two minutes (or five times these levels to the thyroid) at the site boundary <u>for adverse meteorology</u>.
- These dose rates are projected based on other plant parameters (e.g., radiation level in containment with leak rate appropriate for existing containment pressure) or are measured in the environs.
- EPA Protective Action Guidelines are projected to be exceeded outside the site boundary.
- Imminent loss of physical control of the plant.
- Severe natural phenomena being experienced or projected with plant not in cold shutdown.
- Earthquake greater than SSE levels.
- Flood, low water, tsunami, surge, seiche greater than design levels or failure of protection of vital equipment at lower levels.
- Sustained winds or tornadoes in excess of design levels.
- Other hazards being experienced or projected with plant not in cold shutdown.
- Aircraft crash affecting vital structures by impact or fire.
- Severe damage to safe shutdown equipment from missiles or explosion.
- Entry of uncontrolled flammable gases into vital areas. Entry of uncontrolled toxic gases into vital areas where lack of access to the area constitutes a safety problem.
- Other plant conditions exist that warrant activation of emergency centers and monitoring teams or a precautionary notification to the public near the site.
- Evacuation of control room and control of shutdown systems not established from local stations in 15 minutes.

**Extracted from NUREG-0654, FEMA REP-1, Rev. 1, dated November 1980.*

EXAMPLE INITIATING CONDITIONS: GENERAL EMERGENCY*

- Effluent monitors detect levels corresponding to one rem/hr W.B. or five rem/hr thyroid at the site boundary under actual meteorological conditions.
- These dose rates are projected based on other plant parameters (e.g., radiation levels in containment with leak rate appropriate for existing containment pressure with some confirmation from effluent monitors) or are measured in the environs.

Note: Consider evacuation only within about two miles of the site boundary unless these site boundary levels are exceeded by a factor of ten or projected to continue for ten hours or EPA Protective Action Guideline exposure levels are predicted to be exceeded at longer distances.

- Loss of two of three fission product barriers with a potential loss of third barrier (e.g., loss of primary coolant boundary, clad failure, and high potential for loss of containment).

- Loss of physical control of the facility. (Note: Consider two-mile precautionary evacuation.)
- Other plant conditions exist, from whatever source, that make release of large amounts of radioactivity in a short time period possible, e.g., any core melt situation. See the specific PWR and BWR sequences below.

Note: For core melt sequences where significant releases from containment are not yet taking place and large amounts of fission products are not yet in the containment atmosphere, consider two-mile precautionary evacuation. Consider five-mile downwind evacuation (45 deg. to 90 deg. sector) if large amounts of fission products (greater than gap activity) are in the containment atmosphere. Recommend sheltering in other parts of the plume exposure emergency planning zone under this circumstance.

For core melt sequences where significant releases from containment are not yet taking place and containment failure leading to a direct atmospheric release is likely in the sequence but not imminent and large amounts of fission products in addition to noble gases are in the containment atmosphere, consider precautionary evacuation to five miles and ten-mile downwind evacuation (45 deg. to 90 deg. sector).

For core melt sequences where large amounts of fission products other than noble gases are in the containment atmosphere and containment failure is judged imminent, recommend shelter for those areas where evacuation cannot be completed before transport of activity to that location.

As release information becomes available, adjust these actions in accordance with dose projections, time available to evacuate, and estimated evacuation times given current conditions.

Example PWR Sequences.

- Small and large LOCAs with failure of ECCs to perform, leading to severe core degradation or melt in from minutes to hours. Ultimate failure of containment likely for melt sequences. (Several hours likely to be available to complete protective actions unless containment is not isolated).
- Transient initiated by loss of feed water and condensate systems (principal heat removal system) followed by failure of emergency feed water system for extended period. Core melting possible in several hours. Ultimate failure of containment likely if core melts.
- Transient requiring operation of shutdown systems with failure to scram which results in core damage or additional failure of core cooling and makeup systems (which could lead to core melt).
- Failure of off-site and on-site power along with total loss of emergency feed water makeup capability for several hours. Would lead to eventual core melt and likely failure of containment.
- Small LOCA and initially successful ECCS. Subsequent failure of containment heat removal systems over several hours could lead to core melt and likely failure of containment.

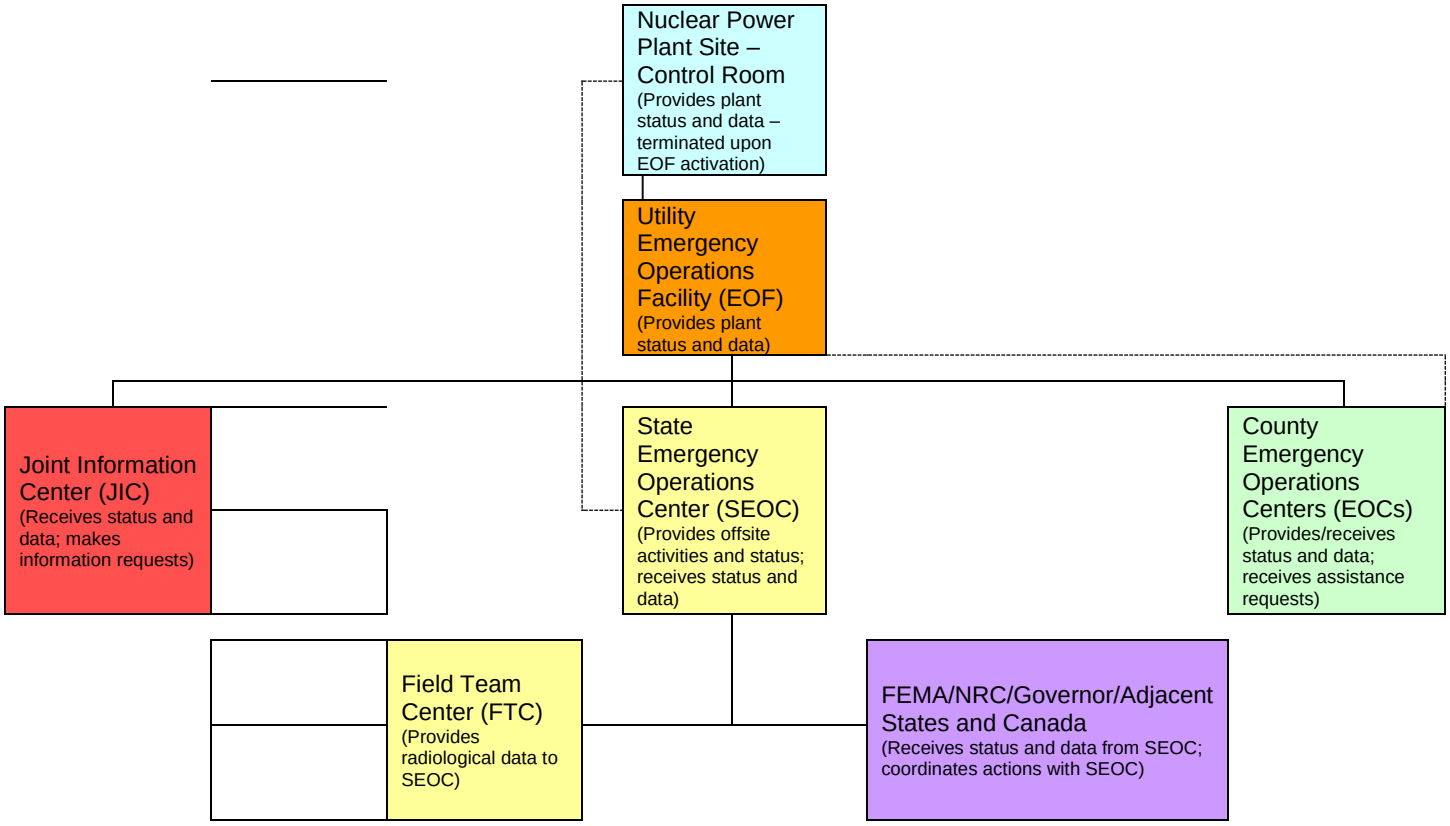
Note: Most likely containment failure mode is melt-through with release of gases only for dry containment; quicker and larger releases likely for ice condenser containment for melt sequences. Quicker releases expected for failure of containment isolation system for any PWR.

Example BWR Sequences.

- Transient (e.g., loss of off-site power) plus failure of requisite core shutdown systems (e.g., scram). Could lead to core melt in several hours with containment failure likely. More severe consequences if pump's trip does not function.
- Small or large LOCAs with failure of ECCS to perform leading to core melt degradation or melt in minutes to hours. Loss of containment integrity may be imminent.
- Small or large LOCA occurs, and containment performance is unsuccessful affecting longer-term success of the ECCS. Could lead to core degradation or melt in several hours without containment boundary.
- Shutdown occurs but requisite decay heat removal systems (e.g., RHR) or non-safety systems heat removal means are rendered unavailable. Core degradation or melt could occur in about ten hours with subsequent containment failure.
- Any major internal or external events (e.g., fires, earthquakes, substantially beyond design basis) which could cause massive common damage to plant systems resulting in any of the above.

**Extracted from NUREG-0654, FEMA REP-1, Rev. 1, dated November 1980.*

Inter – EOC Communications Links*



*Dashed lines --- indicate communication links that are terminated: (Plant Site to SEOC upon EOF activation; EOF to County EOC upon SEOC activation).

Nuclear Incident Assessment. An Assessment Unit will be formed within the SEOC to collect, analyze, display and report incident-related information, to maintain records of radiological exposure, and to develop protective action recommendations based on technical data received from the various sources. The Assessment Unit will support the SEOC Operations Section and Incident Management Section in providing technical data upon which decisions for response and recovery actions can be made. The Assessment Unit will consist of a combination of state response staff as well as a representative (or representatives) from the plant owner/operator. The plant representative(s) will provide liaison to and coordinate with state response staff, interpret incident-related information provided by the plant and field teams, and serve as a health physics liaison (HPL).
Note: The collection and compilation of field monitoring data and other information is performed at the FTC, which serves as the central point for receipt and dissemination of all field monitoring data and the primary point for coordination of sample media.

State Radiological Control Agency. The Materials Management Division of the Department of Environment, Great Lakes, and Energy (EGLE/MMD) is the state radiological control agency by statute. The EGLE/MMD coordinates radiation control programs of state departments/agencies acting within their statutory authorities and has general authority for controlling radioactive materials and sources of radiological contamination. When a nuclear incident occurs, EGLE/MMD coordinates state field team activities and emergency worker exposure control and advises state and local authorities on all radiological matters. This includes control of contamination, recovery and reentry, quality of food and water, countermeasures to minimize radiation exposure, and long-term monitoring and sampling. Detailed procedures related to these functions are found in the EGLE/MMD Nuclear Facilities Emergency Management Plan (NFEMP).

Critical Nuclear Incident Assessment Response Actions

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE) AND SEOC ASSESSMENT UNIT:
Coordinate state field team radiological assessment and control activities:

- Coordinate field team radiological monitoring and sampling.
- Using the information obtained through radiological monitoring and sampling and from other sources, assess the nature and extent of the incident.

- Assess meteorological conditions using information received from the utility, state meteorologists, online meteorological web sites, and other sources.
- Assist in assessing protective action recommendations.
- Coordinate the distribution of dosimetry to state emergency workers and maintain records of exposure.
- Control exposure to the extent possible.
- Based upon the incident assessment, define (by identifiable geographic boundaries) the area actually or potentially affected.

Note: Definition of geographic boundaries is a joint cooperative effort between the MSP/EMHSD, the EGLE/MMD, the utility liaison and HPL at the SEOC, and the affected local government, as appropriate. The SEOC Incident Management Section will use this information in formulating protective action orders.

Nuclear Incident Public Information.

Joint Information Team. In the event of a nuclear incident, a JIC will be established near the affected nuclear facility for the joint issuance of emergency information by the JIT. The JIT consists of public information officers from the utility, the State, the affected local government(s), and the federal government. The JIT will operate from the JIC and maintain contact with the appropriate EOC to collect incident-related information. The PIOs on the JIT will exchange information in a timely manner to ensure that accurate information is developed for dissemination to the public.

The Governor's Press Secretary is designated the State Public Information Officer (SPIO). The SPIO or a designee will serve as the state spokesperson in the JIC and the primary point of contact at the state level for the news media. Federal, local, and utility PIOs on the JIT are as designated in their respective public information plans. Each PIO on the JIT will provide administrative and clerical support as necessary and maintain communications links to their EOC to have access to information and to report back news being released. A representative from EGLE/MMD will provide radiological health expertise to the SPIO to ensure the technical accuracy of information issued to the public by the JIT.

Joint Information Center. The JIC provides a central location for news media representatives to receive accurate, current information concerning emergency conditions at the plant and a contact for the public to call for additional information. It is the source of all authenticated and coordinated information. The JIC generally contains a large room (or rooms) for media briefings, private offices for use by the various PIOs, a media work area, and graphic arts services. (Refer to the "Nuclear Facility Locations" table for the JIC location near each plant site. Refer to the Information on Planning ESF for additional information on the JIC concept.)

<u>JIC Activation and Operation</u>. Establishment of the JIC is a joint responsibility of state and local government and the utility. The JIC will be activated upon the declaration of "state of disaster" or "state of emergency" by the Governor or per the affected utility's procedures. Upon notification by the MSP/EMHSD, the Governor's Press Secretary (the designated SPIO) is responsible for coordinating with the plant owner/operator and MSP/EMHSD regarding the activation and operation of the JIC. The utility will provide the physical location, equipment, and support materials for the JIC. Equipment and materials available at the JIC to supplement the needs of the news media and JIT include telephones, computers, copy and facsimile machines, and nuclear-related reference materials.

The SPIO or a designee will coordinate the release of information. News releases will be issued jointly, with each respective PIO on the JIT presenting information applicable to his/her jurisdiction or organization. News briefings will be held at least once per day during a nuclear incident. News releases will be issued more often as conditions warrant. If a disagreement arises among the parties involved in disseminating information, because of conflicting information, the SPIO and the State Moderator at the JIC (normally an MSP/EMHSD staff person) will attempt to resolve the disagreement so that consistent information will be provided to the media and public. The State Director of Emergency Management and Homeland Security (SDEMHS) is the authorizing signatory of information that is disseminated from the JIC.

Prior to JIC activation, the respective PIOs on the JIT will disseminate emergency information to the news media in accordance with normal day-to-day procedures or from their respective EOCs. Contact and coordination among the PIOs will be maintained to ensure that consistent, accurate information is disseminated.

Rumor Control in the JIC. The JIC also functions as a center for rumor control. Designated public telephone lines will be reserved for use by the public wishing to obtain specific information. These telephone numbers will be publicized widely at the time of the incident through news releases and through social media. Representatives from the affected local government and/or the plant owner/operator will staff the lines. It is anticipated that rumors will be kept to a minimum through the use of the JIC as the sole authenticated source of information.

Annual Emergency Information Dissemination. On an annual basis, emergency information is disseminated to the public within each nuclear power plant's Primary EPZ, informing them on how they will be notified and what their actions should

be in the event of a nuclear incident. The MSP/EMHSD participates with the utilities and the affected local governments in the preparation and review of this information. Affected local governments are responsible for reviewing census data to ensure that emergency information is displayed in non-English speaking languages if needed. The information is distributed (in the form of brochures, calendars, etc.) to households within the Primary EPZ, and to public locations (i.e., restaurants, hotels/motels, stores, etc.) in the Primary EPZ where the transient population is likely to frequent. The information is also posted on each plant's web site for viewing and downloading by the public. The news media also aids in publicizing the availability of the information. The information includes but is not limited to:

- Background information on radiation and its effects.
- A description of the EPZs (Primary and Secondary) around the plant.
- Protective measures that may be implemented (e.g., warning sirens, EAS broadcasts, evacuation routes, reception centers, sheltering, respiratory protection, radio-protective drugs, and their distribution, etc.).
- Special (functional) needs populations information and registry materials.
- Information pertaining to the agricultural community.
- Contacts for additional information.

If a nuclear release exceeds the Primary EPZ, the EAS broadcast will direct the public to the MSP/EMHSD website where material information contained in the Public Information brochure will be located.

In addition to this annual information dissemination effort, the MSP/EMHSD, utilities and affected local governments may jointly conduct annual news media briefings near each plant site to acquaint media representatives with emergency plans, provide information on radiation, and provide points of contact for release of public information. These briefings will be conducted at the discretion of the participating parties and may be held at the time of the utility's required annual exercise for each EPZ.

Nuclear Incident Protective Actions. Protective actions for a nuclear incident are based on the incident classification as described in the "Nuclear Incident Emergency Action Level Classification System" section. The plant owner/operator will initially classify the incident according to this four-level classification system. The Governor, MSP/EMHSD, EGLE/MMD and other state response departments/agencies in the SEOC will review the plant's initial classification and concur with the classification or change it based on the available incident data. The Governor will make appropriate protective action orders based on these recommendations and in accordance with the following provisions for each of the four classification levels:

Notification of Unusual Event. EGLE/MMD has the responsibility to receive the accident information and close out, stand by for close out, or prepare to escalate to a more severe classification, as appropriate.

Alert. EGLE/MMD has the responsibility to mobilize, monitor, and investigate the cause of excessive radiation levels, and assure that corrective measures are progressing, as appropriate.

Site Area Emergency.

<u>Investigation</u>. EGLE/MMD has the responsibility to monitor environmental levels of radiation to confirm or determine dose levels and assure that measures are being taken to correct the deficiency causing the release of radioactive materials.

<u>Limitations</u>. EGLE/MMD and MDARD have the responsibility to order and enforce limitations or alternations of food or water supplies, if necessary.

General Emergency.

<u>Evacuation of a Land or Water Area</u>. The Governor may order evacuation of an affected area, based on applicable state and federal guidance. Evacuation aids specific for each nuclear facility are incorporated in the EOPs of local governments affected by the incident and referenced in the NFEMP.

<u>Protective Sheltering of the Public</u>. The Governor may order protective sheltering of an affected area, based on applicable state and federal guidance. Shelter aids specific for each nuclear facility are incorporated in the EOPs of the affected local governments and referenced in the NFEMP.

<u>Limitations or Alterations of Food or Drinking Water Supplies</u>. EGLE/MMD and MDARD may order and enforce limits in accordance with applicable state and federal guidance as referenced in the NFEMP.

Onsite Contamination Control. EGLE/MMD may order restrictions from an onsite area, normally accessible to the public, which is contaminated with radioactive material in excess of applicable state and federal guidance limits. The EGLE/MMD may review the nuclear facility radioactive contamination data, perform confirmatory tests if necessary, and release such an area for public use only when contamination levels are below those specified in the NFEMP.
Offsite Contamination Control. EGLE/MMD may order contamination control of persons or offsite areas that become contaminated with radioactive material in excess of applicable state and federal guidance limits. Offsite monitoring may be intensified as indicated by the contamination problem. When possible, the plant owner/operator will perform decontamination and disposal of radioactive material with the permission of the owner or controller of the contaminated offsite area. EGLE/MMD may specify or approve procedures for access control, decontamination, and material disposal. Detailed procedures are included in the NFEMP.

Nuclear Incident Medical Support. EGLE/MMD and MDHHS-Health are jointly responsible for coordinating medical support activities for a nuclear incident, which includes the following basic elements:

Medical Emergency Plans. Medical support resources specific for each nuclear facility are identified in the health services annex in local EOPs and are referenced in the NFEMP.

Decontamination Data. EGLE/MMD has the authority to review final wipe-test and area radiation data after decontamination and perform confirmatory tests if deemed necessary.

Emergency Worker Dose Criteria. Criteria for controlling radiation doses to emergency workers are detailed in the NFEMP. The criteria include the use of protective equipment/supplies and radiation monitoring instruments, as well as information on measuring radiation doses to assure doses are below appropriate dose limits. EGLE/MMD the point of contact to provide advice on exceeding exposure limits and request authorization to receive additional exposure for special lifesaving missions for local jurisdictions and state emergency workers.

Radiation Exposure Records. EGLE/MMD has the authority to review nuclear incident-related records of offsite radiation dose measurements and estimations and to retain a copy of the records and calculations for permanent file and follow-up. Departmental emergency worker exposure records, per the NFEMP, are retained for permanent file and follow-up. EGLE/MMD has the responsibility to accumulate information, data, and exposure measurement records for determination and evaluation of individual and population radiation doses, per the NFEMP, and retain them for permanent file and follow-up.

Medical Provisions. Medical evaluations of the affected population may be advised or provided, as prescribed by the MDHHS Director, in consultation with the MDHHS Chief Medical Executive and EGLE/MMD.

Emergency Worker Protective Drugs. The MDHHS-Health, in consultation with EGLE/MMD, has the authority to order the distribution and ingestion of thyroid blocking agents (potassium iodide or “KI”) for state and local emergency workers, persons with impaired mobility, the infirm, and persons that cannot be evacuated. This information will be released through media news release.
Note: Refer to the “General Public Protective Drugs” section below for background information on the use of potassium iodide as a protective measure during a radiological emergency.

Responsibility. The MSP/EMHSD is responsible for coordinating the acquisition, distribution, and replacement of potassium iodide in sufficient quantities as needed such that the drug is available at each location on a continuous basis in advance of a nuclear incident. Potassium iodide is in tablet form, and a 14-day supply (130 mg per day) is available to each emergency worker. Re-supply from the manufacturer is available within 72 hours, if needed.

Storage. The potassium iodide for state emergency workers is stored and maintained by the MSP/EMHSD with the exception of EGLE/MMD Nuclear Facilities Unit, which receives its own supply through the MSP/EMHSD. Local emergency management organizations that have a nuclear power plant in their service area have been provided a supply to distribute if they are ordered to do so by the MDHHS-Health.

Efficacy. The MSP/EMHSD is responsible for ensuring that if the shelf life of stored Potassium Iodide is expired, a sample from each lot is sent to an independent laboratory for annual testing. A current letter of efficacy is located at the MSP/EMHSD.

Issuance. On behalf of the MDHHS Chief Medical Executive, the MDHHS-Health EMC issues protective action guides to issue and ingest potassium iodide by emergency workers and others on the level of emergency at the plants. EGLE/MMD also advises when workers can discontinue taking the drug.

Distribution. Local health officers and medical directors are responsible for developing and implementing plans for the storage, distribution, and record keeping of potassium iodide issued to and ingested by emergency workers and others based upon guidance from EGLE/MMD.

Recordkeeping. Records of potassium iodide ingestion are provided to both EGLE/MMD and the MDHHS-Health for purposes of radiation dose assessment and medical follow-up, respectively.

Medical Follow-Up. The MDHHS Director will provide for the medical follow-up at the state level for all emergency workers and members of the public that were administered potassium iodide.

General Public Protective Drugs. Radioactive iodine (radioiodine) is one of the products that could be released in a serious nuclear power plant incident. Potassium iodide is a non-radioactive form of iodine that may be taken to reduce the amount of radioactive iodine absorbed by the body's thyroid gland. Potassium iodide offers protection only to the thyroid gland, and its use would be to supplement evacuation and in-place sheltering.

Evacuation and in-place sheltering are the primary means of protection in a radiological emergency. State and county officials will use the EAS to notify the public of the need to evacuate, to shelter, or to take potassium iodide. Potassium iodide is available to persons within the Primary EPZ through the MDHHS pre-incident distribution program, although individuals that are allergic to iodine should not take potassium iodide.
Note: Detailed instructions on the distribution of potassium iodide can be found in the mailing provided by the nuclear power plants to households in the Primary EPZ, and on the MDHHS-Health web site at www.michigan.gov/KI.

Protection of Food and Feed Resources. Following a nuclear incident, the state agency EMC for MDARD is primarily responsible for preventing the radiological contamination of foods, animal feed, and other agricultural resources within the ingestion pathway (the 50-mile Secondary EPZ around the nuclear plant). Monitoring, establishment of regulatory controls, and management of the impacted food resources occurs primarily in radiologically-contaminated sectors/zones. The principle radiological exposure through the ingestion pathway is from ingestion of contaminated water or foods such as milk, fresh fruit or vegetables, and animal feeds. Depending on the incident scenario, the duration of radiological exposure to the food chain could range from hours to months. Wind direction and velocity and other environmental conditions influence the actual size of the sampling area. The radiological contaminants from the incident will be defined by the departments/agencies within the SEOC.

MDARD Sampling, Monitoring and Analysis. The MDARD has primary regulatory and sampling responsibility for commercial food and feed products. EGLE/MMD field teams primarily provide sampling services within contaminated areas and MDARD inspectors primarily provide sampling services outside the contaminated sector/zone to confirm that food and feed has not received radiological contamination. Sampling may occur on farms, in processing plants, and in retail and wholesale outlets. Milk, vegetables, fruits, grains, forage, soils, and water sampling may be required to identify areas and levels of radiological contamination. Depending on the magnitude of the incident, additional MDARD inspectors may be assigned from other regions or federal departments/agencies may be requested to assist. USDA, FDA, and Michigan State University will identify farm crops ready for harvest, and sampling assistance, if necessary, may be provided by USDA and FDA.

Laboratory Analysis. All samples will be provided to the EGLE for radiological analysis at its Radiological Protection Laboratory (RPL) in Lansing. The Food and Drug Administration of the U.S. Department of Health and Human Services (FDA/HHS) and the DOE may also provide radiological lab resources. Milk, feed crops, and other products from processing plants are monitored/sampled within the ingestion pathway and beyond to assure that these products are wholesome and safe for consumption. Contaminated milk, food, and feed are excluded from the "commercial" supply per radiological guidance. Regulatory controls of radiological contaminated food and feed crops are enforced by MDARD inspectors and are consistent with radiological protective guidance provided by EGLE/MMD and approved by MDARD executive staff.

Recovery and Reentry. Recovery and reentry is coordinated through the SEOC and is a joint cooperative responsibility of the Governor, EGLE/MMD and MSP/EMHSD, other state response departments/agencies, the involved utility, and the affected local governments. EGLE/MMD, as the radiation control agency for the state, has primary authority over recovery and reentry and will consider the following provisions when recommending recovery/reentry actions:

General Emergency.

Evacuated Areas – Approved Reentry. EGLE/MMD has the authority to recommend or approve reentry of an evacuated area when monitoring, operational information, and sample data indicate that the projected dose will be below applicable state and federal guidance limits specified in the NFEMP. EGLE/MMD has the responsibility to review final monitoring

results and conclusions before reentry. Monitoring of environmental radiation levels will continue at least until radiation levels reach and remain below applicable state and federal guidance limits specified in the NFEMP.

Shelter. EGLE/MMD has the authority to recommend rescission of a shelter order when monitoring and operational information indicate that radiation levels should remain below applicable state and federal guidance limits specified in the NFEMP, or when the order is replaced by an evacuation notice.

Food and Water Limitations. EGLE/MMD has the authority to approve use of a drinking water supply when radioactive material concentrations are below applicable state and federal guidance limits. The MDARD has the responsibility to terminate restrictions on livestock feeding and farm and garden produce consumption when monitoring data and operational information indicate that the projected dose will be below applicable state and federal guidance limits.

Contamination Control. EGLE/MMD has the authority to terminate contamination controls when monitoring data and operational information indicate that radiation levels are, and will remain, below applicable state and federal guidance limits specified in the NFEMP.

Site Area Emergency. The MDARD has the authority to modify or terminate food and water restrictions on the basis of monitoring data that indicate that the projected doses will be below applicable state and federal guidance limits specified in the NFEMP. Intensive monitoring will continue at least until radiation levels decrease below specified limits.

Alert. EGLE/MMD may terminate intensified monitoring when radiation levels decrease below applicable state and federal guidance limits specified in the NFEMP, in consultation with the U.S. Nuclear Regulatory Commission (NRC).

Critical Radiological Emergency Preparedness Activities. The MSP/EMHSD is designated as the lead state agency for radiological emergency response planning, preparedness, and response. The MSP/EMHSD maintains 24-hour response capability and is the initiating agent for emergency response to a nuclear incident. The MSP/EMHSD receives advice and assistance from EGLE/MMD, MDARD, MDHHS-Health, and other state departments/agencies in carrying out the following radiological emergency planning, training, exercising, and other preparedness activities aimed at improving the State's response and recovery capabilities for a nuclear incident:

Radiological Emergency Planning.

Plant Emergency Plans. The MSP/EMHSD and EGLE/WMRPD have the joint responsibility to review and retain a copy of plant emergency plans.

Local Emergency Operations Plans. EGLE/MMD, in coordination with the MSP/EMHSD, annually reviews the radiological aspects of local EOPs. Both agencies retain copies of applicable local EOPs.

Michigan Emergency Management Plan. EGLE/MMD, in coordination with the MSP/EMHSD planning staff, reviews the radiological aspects of the MEMP and provides an annual record of review. MSP/EMHSD planning staff also annually reviews all SEOC Procedures and updates are incorporated as needed. Additionally, planning staff reviews all maps that are used to display information during a nuclear event. Updates are made either on an annual basis or sooner when current information is provided.

Nuclear Facilities Emergency Management Plan. EGLE/MMD maintains the NFEMP, which is comprised of administrative controls, radiological assessment, environmental field sampling, and decontamination procedures. The Nuclear Facilities Emergency Management Plan is the supporting radiological

Medical Facility Emergency Plans. EGLE/MMD, in coordination with the MSP/EMHSD, reviews medical facility emergency plans to assure that trained medical personnel, transportation vehicles, and medical facilities equipped with adequate equipment for monitoring, decontaminating, and disposing of radioactive materials are available on a 24-hour basis for treatment of radiological casualties.

National Response Framework: Nuclear / Radiological Incident Annex. EGLE/MMD and MSP/EMHSD both provide liaisons to the NRC and FEMA in the development and continuous maintenance of the NRF Nuclear/Radiological Incident Annex (NRIA).

Correctional Facility Emergency Plans. Although no state correctional facilities are located within a Primary EPZ of a nuclear power plant, some local jails are within these zones. (Refer to local EOPs for locations.) If a local jail is required to evacuate, the MDOC can provide information on the nearest state correctional facilities capable of accommodating the evacuating population. Transportation will be provided by those facilities requiring evacuation, supplemented by MDOC

vehicles and drivers (from state correctional facilities not affected by the emergency and/or Correctional Industries) as available. If in-place sheltering is considered the most appropriate protective action, prisoners, and staff of local jails in the affected area could be restricted to appropriate buildings and given instructions on actions to take.

Intermediate and Local School District Emergency Plans. The MDE and the MSP/EMHSD can assist intermediate and local school districts in identifying resources to aid them in developing emergency procedures for nuclear incidents. Schools located within the Primary EPZ should develop procedures that provide for both evacuation of the facility and in-place sheltering and are consistent with the local EOP.

State Park/Recreation Area Emergency Plans. The MDNR is responsible for maintaining nuclear incident emergency procedures for state parks, recreation areas and other MDNR public facilities located within the Primary and Secondary EPZ of a commercial nuclear power plant. (Ideally, the nuclear incident procedures will be part of a larger, all-hazards emergency plan for the facility.) The MDNR must ensure that the plans and procedures are consistent with the local jurisdiction's EOP, and that the MDNR facility employees are properly trained and knowledgeable of their role in a nuclear incident (and other disasters). The MSP/EMHSD will provide advice and assistance as required in the development of these plans.

Radiological Emergency Training. The MSP/EMHSD REP Unit Trainer is responsible for developing, implementing, and evaluating state-level radiological emergency training programs (described below) which are made available to satisfy NUREG-0654 radiological emergency planning and response training requirements. When needed, EGLE/WMRPD and FEMA conducts supplemental training for offsite response organizations. Each offsite response organization shall provide for the initial and annual retraining of personnel with emergency response functions and responsibilities. Each response organization must participate in and receive training where mutual aid agreements exist between local agencies (such as fire, police, and ambulance/rescue). The training must also be offered to the other departments that are members of the mutual aid district. Just-in-time training is offered by MSP/EMHSD training staff during scheduled drills and out of sequence events.

Each offsite response organization must establish a training program for instructing and qualifying personnel who will prepare and implement radiological emergency response plans. Specialized initial and annual retraining programs must be provided in the following personnel categories:

- Directors or coordinators of response organizations.
- Incident assessment personnel.
- Radiological monitoring teams and analysis personnel.
- Law enforcement, security, and firefighting personnel.
- First aid and rescue personnel.
- Local support service personnel – including emergency service personnel and NGOs (e.g., American Red Cross, MIVOAD, etc.).
- Medical support personnel.
- Personnel responsible for transmission of emergency information and instructions.

The MSP/EMHSD provides training on radiological emergency response to state emergency workers involved in radiological emergency response activities. If requested, MSP/EMHSD can also provide initial and annual training to local offsite response organizations. MSP/EMHSD's training program includes presentations on the basics of radiation and radiological health physics, radiological emergency response procedures, and individual response procedures by function. The MSP/EMHSD maintains a record of all state and local personnel trained.

Radiological Emergency Drills and Exercises.

Drills. Drills covering potential nuclear incidents are conducted biennially at each of the counties included in the Primary EPZs of the operating plants. The drills are coordinated by the MSP/EMHSD and are conducted in conjunction with the utility, appropriate state response departments/agencies, and the affected local government(s).
Note: A drill is a supervised instruction period aimed at testing, developing, and maintaining skills in a particular emergency operation. Drills must be supervised and evaluated by a qualified drill instructor and involve all operations heads having a responsibility for directing specific response functions during a nuclear incident. Drills review such elements as EOC standard operating procedures, leadership duties, knowledge of plans and procedures, and the ability to correctly analyze and respond to the situation at hand.

In addition to the general operations drills, specific functional drills are held (as required by NUREG-0654) as described below:

Communications Drills. Communications between Licensee, State, and local governments within the 10-mile Primary EPZ must be tested monthly. Communications with federal emergency response agencies and states within the 50-mile

Secondary EPZ must be tested quarterly. Communications between the nuclear facility, state and local EOCs, and field assessment teams must be tested annually. Communications drills must include the aspect of understanding the content of the messages.

Radiological Monitoring Drills. Plant environs and radiological monitoring drills must be conducted annually. These drills shall include collection and analysis of all sample media, and provisions for communications and record keeping. In addition, health physics drills will be conducted semi-annually which involve response to an analysis of simulated elevated airborne and liquid samples and direct radiation measurements in the environment. (These state drills need not be held at each plant site.)

Local and state governments will hold critiques, as soon as practicable after each drill, to discuss problems and issues that arose during the drills. As a result of these reviews, corrective actions will be incorporated in the plans and will be applicable toward the requirement of an annual review of radiological response plans.

Exercises. A nuclear incident response exercise will be conducted at each of the operating plant sites in Michigan on a rotating biennial schedule, unless otherwise required. This exercise will test the coordination, effectiveness, and familiarity of personnel with established nuclear incident response procedures. The exercise, and an appropriate scenario, will be developed and coordinated by the MSP/EMHSD and will involve applicable state, local, and federal governmental agencies and private organizations having a response role. Designated personnel will assemble as necessary in the SEOC, local EOCs, and other emergency coordination facilities to prompt appropriate response actions.

Official observers/evaluators from federal regulatory agencies (e.g., FEMA, NRC, etc.) as well as state and local government will evaluate and critique the exercise and the state of readiness for a nuclear incident. A critique session will be held, as soon as practicable after the exercise, to evaluate the ability of the agencies and organizations to respond as called for in the appropriate emergency plans. Each participating response agency/organization is responsible for initiating such changes in their respective plans as pointed out during the critique. The MSP Director will ensure that necessary changes and updates are made in the MEMP. The chief executive officer of participating local governments will ensure that local EOPs are updated and changed, as necessary. Each participating agency/organization is responsible for establishing the means for evaluating observer and participant comments on areas needing improvements, including emergency plan procedural changes, and for assigning responsibilities for implementing corrective actions.

In conjunction with the biennial exercise, the SPIO will activate the JIT to train the PIOs and the local news media in the procedures that will be followed in the event of an actual nuclear incident. The news media will be acquainted with the emergency plan, provided information on radiation and its effects, and made aware of the points of contact that will be available to them.

Note: An exercise is an event that tests the integrated capability and all major elements existing within emergency preparedness plans and organizations. The emergency preparedness exercise for a nuclear incident must simulate an emergency that results in offsite radiological releases that would require response by offsite authorities. (A no-release exercise as well as an exercise that tests offsite response to a rapid escalation to a Site Area Emergency or General Emergency are also tested within an 8-year cycle.) The exercise must be conducted as prescribed in NRC and FEMA rules and include mobilization of state and local personnel and resources adequate to verify the capability to respond to an incident scenario requiring response. The nuclear facility response exercise must also be conducted prior to the adoption of the nuclear incident procedures section of the emergency plan.

Ingestion Pathway Exercise. An exercise that tests all state and local personnel and resource capabilities for responding to a nuclear event that extends beyond the 10-mile EPZ will be tested within FEMA's 8-year exercise cycle. All jurisdictions located in the 50-mile EPZ of a nuclear power plant are strongly encouraged to participate in a full-scale exercise, tabletop, or other ingestion pathway training.

Scenario Development. Drill and exercise scenarios developed will vary from year-to-year such that all major elements of emergency plans and response organizations will be tested within an eight-year period. Exercises will be conducted under various weather conditions, and some may be unannounced. Exercises may start between 6 PM and 4 AM and midnight and 6 AM once every eight years. Exercises will be carried out to allow free-play for decision making and to meet established objectives. The scenarios will include, but not necessarily be limited to, the following elements:

- The basic objective of the drill or exercise and appropriate evaluation criteria.
- The date(s), time period, place(s), and participating organizations.
- The simulated events.
- A time schedule of real and simulated initiating events.
- A narrative summary describing the conduct of the exercise or drill to include such items as simulated casualties, offsite fire department assistance, rescue of personnel, use of protective clothing, deployment of radiological monitoring teams, and public information activities.
- A description of the arrangements for and advance material to be provided to official observers.

Other Key Preparedness Activities.

Potassium Iodide Acquisition, Distribution and Replacement. The MSP/EMHSD is responsible for coordinating the acquisition, distribution, and replacement of potassium iodide in sufficient quantities as needed such that the drug is available at each location on a continuous basis in advance of a nuclear incident. The potassium iodide for state emergency workers is stored and maintained by the MSP/EMHSD, with the exception of EGLE/MMD Nuclear Facilities Unit, which receives its own supply through the MSP/EMHSD. Local health departments that have a nuclear power plant in their service area have a supply for distribution to local emergency workers and others. Local health officers and medical directors are responsible for developing and implementing plans for the storage, distribution, and recordkeeping of potassium iodide ingested by emergency workers based on MSP/EMHSD guidance. (Records of potassium iodide ingestion are provided to both EGLE/MMD and MDHHS-Health for purposes of radiation dose assessment and medical follow-up, respectively.)

Annual Emergency Information Dissemination. The MSP/EMHSD participates with the utilities and affected local governments in the annual preparation and dissemination of nuclear incident emergency information within each nuclear power plant's Primary EPZ. (Refer to the "Nuclear Incident Public Information" section.) The MSP/EMHSD also maintains an inventory of educational materials on response to a nuclear incident. This information can be distributed or made available at news briefings to assist the media and the general public in gaining a better understanding of nuclear incidents and the actions that might be taken in response to them.

Maps and Contact Lists. On a quarterly basis, the MSP/EMHSD updates nuclear incident call down lists, telephone numbers, and Primary/Secondary EPZ maps for use in nuclear incident response and recovery operations. The following maps are produced by MSP/EMHSD and are distributed to all counties within the mile EPZ of a nuclear power plant: 10 Mile EPZ, 50 Mile EPZ, Protective Action Area Populations, Access Control Points and Evacuation Routes, and Reception, Decontamination, and Congregate Care Centers, and State Radiological Monitoring Routes.

Hostile Action Procedures. The MSP/EMHSD and MSP Field Support Bureau (Emergency Support Team) work directly with the utilities and local/federal law enforcement agencies to develop and exercise procedures for responding to a hostile action at a nuclear power plant in Michigan.

Critical Nuclear Incident Response and Recovery Actions

MSP/EMHSD:
Implement and coordinate the State's radiological emergency program. The MSP/EMHSD will implement and coordinate the State's radiological emergency program for response to and recovery from a nuclear incident. Major elements of that program for which the MSP/EMHSD is responsible include but are not limited to:

Notification of Key Departments/Agencies. Refer to the "Critical Nuclear Incident Warning/Communications Response Actions" section.

Emergency Operations/Coordination Centers. The MSP/EMHSD will establish and administer key emergency operations/coordination centers required in response to a nuclear incident, including the SEOC, FTC, and JIC. (Refer to the Direction and Control ESF.) When the FRMAC is established, the MSP/EMHSD will incorporate the FTC into that facility. The MSP/EMHSD will also dispatch liaisons to Primary EPZ county EOCs to ensure coordination of operations and activities.

Assessment. The MSP/EMHSD, in conjunction with EGLE/MMD, will establish and administer an Assessment Unit within the SEOC Incident Management Section to collect, analyze, display and report nuclear incident-related information. (Refer to the "Nuclear Incident Assessment" section.)

Protective Actions. The MSP/EMHSD will assist the Governor, EGLE/WMRPD, MDARD, MDHHS-Health, and other state response departments/agencies in developing appropriate protective actions for a nuclear incident. Protective actions may include evacuation, in-place sheltering, and agricultural advisories/regulatory controls up to and including quarantine of contaminated food and feed resources.

Dosimetry. The MSP/EMHSD will assist in the provision of dosimetry to state emergency workers.

Recovery/Reentry Operations. The MSP/EMHSD will assist the Governor, EGLE/WMRPD, other state response departments/agencies, the involved utility, and the affected local governments in initiating recovery and reentry operations at an appropriate time after the incident situation has stabilized.

MICHIGAN DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT (MDARD):
Maintain agricultural information. The MDARD is responsible for maintaining key agricultural land use information (including locations of farms, dairies, and food processing plants) to facilitate and support the implementation of appropriate protective measures, as described in the "Protection of Food and Feed Resources" section above.

Issue agricultural advisories and protective action guides. The MDARD is ultimately responsible for protecting the public from contaminated food and feed resources in the aftermath of a nuclear incident. To ensure the integrity of the food supply, the MDARD will issue (as appropriate) agricultural advisories and protective action guides regarding radiological contamination of food, and animal feed to food, and feed operators, processing plants, retail and wholesale outlets, and the general public. The principal radiological exposure is from ingestion of contaminated water or foods such as milk, fresh fruits or vegetables, and animal feeds. The duration of radiological exposure to the food chain could range from several weeks to several months. All such advisories and protective action guides will be issued through the SEOC, in coordination with the MSP/EMHSD, EGLE/WMRPD and MDHHS-Health. (Refer to the "Protection of Food and Feed Resources" section.) MDARD will issue an advisory, coordinated through the Joint Information Center (JIC), to alert animal owners (livestock and pets) to take precautions.

Coordinate and conduct monitoring, sampling, inspection, and regulatory services to protect human and animal food supplies and the agricultural environment. The MDARD has primary regulatory and sampling responsibility for commercial food and feed products. In the immediate aftermath of a nuclear incident, MDARD inspectors will be dispatched to inspect and sample food and feed outside of the area suspected of being contaminated by radioactive material for the purpose of confirming wholesomeness. Sampling may occur on farms, in processing plants, and in retail and wholesale outlets (assuming conditions are safe for monitoring). Milk, vegetables, fruits, grains, forage, soils, and water sampling may be required to identify levels of contamination. USDA county offices can provide technical support, guidance and assistance, and communication linkages with agriculture producers and processors.

Samples will be submitted to the EGLE for radiological analysis at its RPL in Lansing. Contaminated milk, food, and feed will be excluded from the commercial supply. Regulatory controls of contaminated food and feed crops will be enforced by MDARD inspectors and are consistent with radiological protection guidance provided by EGLE/MMD and approved by MDARD executive staff. The MDARD will coordinate these activities with federal counterparts (FDA/HHS and USDA Food Safety and Inspection Service). The MDARD also coordinates with local health departments, which are delegated regulatory authority over food service establishments (restaurants and schools).

Provide pet sheltering assistance. The MDARD will provide assistance to shelters where members of the public have brought their pets (see Animal Care Annex.)

Assist in food procurement, safety and sanitation, and the identification and establishment of warehousing and feeding facilities. The MDARD has regulatory support functions related to the protection and maintenance of the food and feed resources within the state (in coordination with appropriate federal agencies) and will assist in the coordination of efforts for an orderly redistribution of these food supplies. The MDARD Director is responsible for coordinating with the USDA regarding the redistribution of food supplies to support the needs of the population in the event of a nuclear incident which results in population shifts due to evacuation or in-place sheltering.

The MDARD will also coordinate with the MDHHS-Human Services for additional food supplies and distribution through the ARC and other NGOs, as well as the MDE for distribution and use of federal food earmarked for the school lunch program. (Refer to the Human Services ESF.)
Note: Major wholesale food warehouses and distribution centers are located in several Michigan communities. The major wholesale/distribution center servicing the Upper Peninsula is located in Green Bay, Wisconsin. Food supplies from these centers will be redistributed to needed areas upon the declaration of a Major Disaster or Emergency by the President, in conjunction with the USDA and other federal authorities. The USDA Farm Service Agency maintains a list of food, feed, and seed facilities for each county in the state, which can also be used to locate large sources of food and warehouse facilities. Requests for additional food supplies to meet the needs of the population will be directed to the USDA in accordance with established procedures.

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES-Health (MDHHS):
Determine the need for administering potassium iodide. The MDHHS-Health, in consultation with EGLE/MMD, has the authority to order the distribution and ingestion of potassium iodide (KI) for state and local emergency workers, persons with impaired mobility, the infirm, and persons that cannot be evacuated. If it is determined necessary to administer potassium iodide, the MDHHS Chief Medical Executive will order state and local agencies to carry out that effort. Records of potassium iodide ingestion are provided to both EGLE/MMD and the MDHHS-Health for purposes of radiation dose assessment and medical follow-up, respectively. The MDHHS Director will provide for the medical follow-up at the state level for all emergency workers and members of the public that were administered potassium iodide. (Refer to the "Nuclear Incident Medical Support" section.)

Coordinate the investigation and control of communicable disease. The MDHHS-Health is responsible for coordinating the investigation and control of communicable disease and for providing laboratory support for communicable disease diagnostics. Laboratory services are coordinated with local health departments and the MDARD and EGLE, as appropriate. Resources available are those associated with performing standard laboratory tests. No field equipment is available. Personnel are available for consultation and onsite investigations as necessary. This includes surveillance, rapid identification, risk communication, and rapid response to public health threats and emergencies.

In the event short- or long-term sheltering is necessary due to a nuclear incident, the MDHHS-Health is responsible for working with local health departments, the ARC, and available private medical resources to prevent outbreaks of communicable disease in public shelters. Shelters are particularly vulnerable to the spread of communicable disease due to the large numbers of persons in the shelters and the common food and water supplies. Potential exists for the spread of communicable disease in the post-incident environment as well, when the population moves from the shelters back into their homes, businesses, schools, etc. under what may be difficult conditions. (Much of the food and water supply may have to be sampled to determine if it is safe from radiological contamination before it can be consumed.)

Healthcare facilities may be experiencing a surge in patients seeking care and treatment for actual or potential conditions related to the incident. Disease prevention and control are of high importance. The MDHHS-Health plays a lead role in this effort. Working in collaboration with local healthcare and public health agencies and officials, the MDHHS-Health is responsible for investigating reported cases of disease outbreak and identifying the source if possible, isolating the source from the general population if appropriate, and mitigating the outbreak through the use of medical countermeasures. The MDHHS-Health Bureau of Laboratories can provide support, as necessary, in performing laboratory analysis on any specimens involved in the outbreak.

Coordinate crisis counseling services with Community Mental Health Services Programs. CMHSPs provide crisis counseling services for disaster survivors and local emergency response personnel. This is done in cooperation with private sector mental health service providers and NGOs such as the ARC. The MDHHS-Health will provide technical consultation and supplemental assistance as requested and available. The MDHHS-Health also participates in the Traumatic Incident Stress Management (TISM) program that is coordinated by the DTMB. The MDHHS-Health will call on the TISM program to address the needs of its own personnel during an emergency response. If necessary, the MDHHS-Health will work with the MSP/EMHSD to seek assistance from the U.S. Department of Health and Human Services (HHS), Substance Abuse and Mental Health Services Administration (SAMHSA) which may be able to provide funding for additional or extended crisis counseling program (CCP) in the event of a Presidential major disaster declaration.

The provision of disaster mental health services for incident survivors and response personnel is part of the response and recovery effort.

Coordinate appropriate medical services. The MDHHS-Health is responsible for providing support to hospitals, pre-hospital, and alternate care settings in the medical management of potential or known injured persons in mass casualty incidents. This will be done consistent with established mechanisms such as Medical Control Authorities and Regional Healthcare Coalitions.
Note: Although the intent of nuclear incident protective measures is to prevent casualties, it is possible that casualties may occur as a result of a nuclear incident.

Coordinate victim identification and mass fatality management services. In a nuclear incident, mass casualties are not inevitable but are certainly a possibility. If necessary, the MDHHS-Health will work with the local health department(s), local medical examiner(s), and other response agencies to implement post-incident mass fatality response plans including identification, documentation, and return of human remains to loved ones for internment (refer to the Health and Human Services ESF.)

Coordinate and monitor the provision of human services to disaster survivors. The MDHHS-Human Services is responsible for supporting a number of human service functions during a nuclear incident, at both the state and local levels. Since local government implements protective actions (evacuation or in-place sheltering) and MDHHS county offices are considered a part of both state and local response organizations, MDHHS county office directors or their designees are expected to report to local EOCs once they are activated. MDHHS county offices are responsible for implementing the tasks assigned to them in the MEMP, as well as those assigned in local EOPs. The MDHHS central office in Lansing will support the MDHHS county offices in securing additional personnel, equipment, or other resources through the SEOC, as required.

The functions for which the MDHHS-Human Services has primary responsibility during a nuclear incident include but are not necessarily limited to:

Registration. The MDHHS-Human Services will provide a registration function at reception centers established locally for registering the population during an evacuation, and during reentry into the area. These centers may also have the dual purpose of detection and decontamination centers to detect for possible contamination on persons and property and to decontaminate if contamination is found. MDHHS workers will register evacuees and assign them to congregate care (shelter) facilities. (Refer to the appropriate local EOP for locations of possible reception and decontamination centers.)

Clothing. If decontamination is necessary, the MDHHS-Health will coordinate with the ARC, MIVOAD and other NGOs to provide clothing at reception and decontamination centers for evacuees and emergency workers whose clothing has been contaminated. The MDOC has support responsibilities in this area.

Shelter. At the reception centers, the MDHHS-Human Services will assign evacuees to a congregate care center (shelter) if evacuation is ordered. Congregate care centers are locally-designated, and their locations are listed in the appropriate local EOP. The MDOC, MDMVA and MDE have support responsibilities in this area.

Food. The MDHHS-Human Services will coordinate with the ARC, MIVOAD and other NGOs to provide food at congregate care centers, if evacuation is ordered. The MDARD, MDOC, MDMVA, and MDE have support responsibilities in this area. (When the cause of an incident lies with a power plant or another entity where reimbursement processes will be applicable, the ARC, MIVOAD, and other NGOs will request the provision of supplies through government partners that will be in the position to seek reimbursement.)

Crisis Counseling. The MDHHS-Human Services will assist the MDHHS-Health in identifying evacuees that may need crisis counseling services. The MDHHS will coordinate the provision of crisis counseling services through local Community Mental Health Services Programs (CMHSPs).

Functional Needs Populations. The MDHHS-Human Services will assist local governments in identifying and assisting persons with functional needs (e.g., hearing impaired, elderly, physically handicapped, non-English speaking). A number of agencies and advocacy organizations in the local community may assist in providing care to these persons, as outlined in local EOPs.

Mass Transportation. The MDHHS-Human Services will assist local governments in coordinating emergency mass transportation for those persons who do not have a means of leaving the disaster area if an evacuation is ordered. (The MDE may have support responsibilities in this area if so directed by the Governor. Refer to the MDE task assignment above.)

MICHIGAN DEPARTMENT OF CORRECTIONS (MDOC):
Provide assistance to local jails requiring evacuation. Although no state correctional facilities are located within a Primary EPZ of a nuclear power plant, some local jails are within these zones. (Refer to local EOPs for locations.) If a local jail is required to evacuate, the MDOC can provide information on the nearest state correctional facilities capable of accommodating the evacuating population. Transportation will be provided by those facilities requiring evacuation, supplemented by MDOC vehicles and drivers (from state correctional facilities not affected by the emergency and/or Correctional Industries) as available. If in-place sheltering is considered the most appropriate protective action, prisoners, and staff of local jails in the affected area could be restricted to appropriate buildings and given instructions on actions to take.

Provide resources to support emergency operations.

Clothing. It may be necessary to provide clothing at locally-established decontamination centers if the public becomes contaminated while they are evacuating. The decontamination process requires that a change of clothing be available if the clothing worn by evacuees (and emergency workers) has been contaminated with radioactive particles. As a short-term emergency resource, the MDOC's supply of clothing for prisoners can be used by evacuees until more appropriate clothing is obtained.

Food. If evacuation is ordered as the best protective measure, MDOC food resources can be made available to feed evacuees. Food from MDOC facilities can be transported to locally-established congregate care centers if the need arises.

Transportation. The MDOC has limited transportation resources that can be made available to evacuate persons having no personal means of leaving the affected area, and to transport emergency workers or jail populations from one location to another.

Note: MDOC facility resources will only be used when other sources of assistance either are not available or have been exhausted. Facility needs must be adequately met before MDOC resources will be used to supplement relief efforts.

MICHIGAN DEPARTMENT OF EDUCATION (MDE):
Note: The MDE has no direct authority over local public-school buildings, school buses, or school equipment and supplies. Local public-school districts are autonomous. Local EMCs must make direct contact with local school administrators/school boards to secure the use of their resources in emergencies or disasters. The following task assignment is intended to supplement those local efforts.

Provide resources to support emergency operations.

Food. School facility food supplies may be used to feed the evacuated population in the event other food resources are not available or have been exhausted. At the direction of the Governor, the MDE may request intermediate school districts to arrange with local school districts for additional food supplies to feed evacuees on a temporary basis until more appropriate sources are available.

In addition, the USDA Food and Nutrition Service (FNS) can provide donated food assistance to the MDE upon request. The USDA may authorize the release of USDA foods from existing inventories, or if those inventories are not sufficient it can acquire food from other existing inventories or through direct market procurement. The USDA can also arrange for transportation of the food to staging areas anywhere in the state. The MDE is responsible for requesting the food and arranging for its receipt, allocation, and distribution to preparation or distribution sites, in coordination with the MDARD.

Mass transportation. School districts within the Primary EPZ have school buses and drivers available for emergency evacuation. Evacuation of schools within the affected area is the first priority. The assignment of buses to specific geographic areas and evacuation routes is made in coordination with the local EMC. Buses will be used to evacuate those persons that have no personal means of leaving the affected area. Specially equipped buses (e.g., with lifts) will be made available for transporting persons with special transportation needs. At the direction of the Governor, the MDE may request intermediate school districts to arrange with local school districts for additional transportation resources as necessary to support evacuation operations.

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE):
Provide radiological expertise to key facilities. EGLE/MMD will provide representatives and technical experts (health physics support staff) to the SEOC, FTC and/or FRMAC, JIC, and RPL to coordinate response activities and to provide technical advice on the radiological and environmental protection aspects of the incident. Additional information related to this task assignment can be found in the following sections of this procedure:

- “Field Team Center”.
- “Nuclear Incident Assessment”.
- “Nuclear Incident Public Information”.
- “Nuclear Incident Protective Actions”.
- “Nuclear Incident Medical Support”.
- “Protection of Food and Feed Resources”.
- “Recovery and Reentry”.

Note: EGLE radiological instrument and equipment resource lists and their maintenance and calibration procedures are referenced in the NFEMP.

MICHIGAN DEPARTMENT OF INSURANCE AND FINANCIAL SERVICES (MDIFS):
Provide insurance information to disaster survivors. As required, the MDIFS will coordinate with appropriate federal and state officials, American Nuclear Insurers/Mutual Atomic Energy Liability Underwriters (ANI/MAELU), and ANI/MAELU member companies regarding the implementation of necessary activities to ensure those affected by the incident receive the insurance benefits entitled to them under the federal Price-Anderson Act. This includes the establishment of temporary claims offices and the dissemination of public information on the locations of claims offices and appropriate documentation and procedures for obtaining assistance.

Provide banking information to disaster survivors. Although physical damage to financial institutions is unlikely in a nuclear incident, some facilities may require decontamination before re-use and therefore may be unavailable to customers for an extended period of time. If required, the MDIFS may be able to assist by working with both affected and non-affected financial institutions and other appropriate agencies and organizations (i.e., NCUA, FDIC, Federal Reserve, etc.) to ensure that adequate financial services and resources are available to affected individuals and areas.

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (MDLARA):
Provide supportive radiation safety assistance. MDLARA radiation safety staff will support EGLE staff in responding to nuclear incidents, as required. The MDLARA can provide health physicists and technical expertise in support of the FTC, radiological monitoring field teams, the JIC, and emergency worker decontamination centers.

Coordinate energy emergency activities. In the event of a nuclear power plant incident, the Michigan Agency for Energy (MAE) and the Michigan Public Service Commission (MPSC) are responsible for maintaining contact with the energy company experiencing the incident, and with other energy companies as necessary, for the purpose of assessing potential impacts to the state's electricity supply. The MAE/ MPSC will advise SEOC staff on statewide and interstate electric energy supply capability, and coordinate efforts to balance the supply and demand of electricity if a shortage occurs. The MAE/MPSC will initially coordinate their response through normal channels at their offices, maintaining coordination with the SEOC through the MAE EMC. The MAE EMC will work directly with other SEOC staff on appropriate measures to stem the energy shortage.

Provide Construction Code and boiler inspection services. The MDLARA Bureau of Construction Codes is responsible for determining the feasibility of safely using a plant that experienced an incident based on structural and mechanical damage. If structural damage occurred to a building (e.g., due to fire or explosion), electrical, plumbing, mechanical, and boiler inspectors will be dispatched as necessary to assess the structural damage, make recommendations for repairs, and determine the feasibility to safely use the building for statewide areas that fall within MDLARA's jurisdiction.

MICHIGAN DEPARTMENT OF LABOR AND ECONOMIC OPPORTUNITY (LEO):
Conduct workplace safety inspections. The Michigan Occupational Safety and Health Administration (MIOSHA) administers and enforces the provisions of the Michigan Occupational Safety and Health Act (1974 PA 154, as amended) to ensure that employees are provided with safe and healthful work environments that are free of recognized hazards. The MIOSHA will determine if damaged areas of the plant can re-open and resume operation in compliance the Construction Safety Standards Commission.

MICHIGAN DEPARTMENT OF MILITARY AND VETERANS AFFAIRS (MDMVA):
Provide military support to civil authorities. Support is dependent upon resource availability at the time of request, but could include:

- Supplemental security at plant site and/or offsite locations (e.g., congregate care centers, access control points).
- Assistance with debris removal and evacuation route maintenance.
- Supplemental medical support.
- Assistance with radiation monitoring and decontamination.
- Staging areas for emergency response personnel.
- Logistical support (e.g., airlift, transportation, communications, maintenance).

MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MDNR):
Protect visitors at state parks and recreation areas. The MDNR is responsible for protecting the safety of visitors at state parks and recreation areas (to include historic facilities/sites, campgrounds, managed hunting areas, state game areas and other public facilities under MDNR stewardship) located within the area impacted by a nuclear incident. Facility managers are authorized to utilize all appropriate methods to warn and protect visitors from radiological contamination, including the use of protective (in-place) sheltering and/or evacuation. Park rangers, conservation officers, and other support staff will be mobilized as necessary to accomplish this mission. Facility managers must ensure that employees are properly trained and knowledgeable of their role in a nuclear incident.

Assist with evacuation of marine traffic. As required, the MDNR will assist local law enforcement, the USCG and other involved agencies with the evacuation of marine traffic located within the protective action area of a nuclear incident.

Provide law enforcement support on evacuation routes. The MDNR will provide conservation officers (as available and required) to assist local and state law enforcement with basic security-related activities (i.e., observe and report, provide presence) on identified evacuation routes.

Provide security support for access control and reentry. The MDNR will provide conservation officers (as available and required) to assist law enforcement and/or private security resources in providing security at access control points during the evacuation and/or reentry process.

Assist with radiological sampling activities. Depending on incident circumstances, MDNR personnel may be requested to assist in the recovery of wildlife, marine life, and plant life samples from within the ingestion pathway for the purpose of radiological analysis.

MICHIGAN STATE POLICE (MSP):
Coordinate with the MDOT on traffic control measures. The affected MSP District will coordinate with the appropriate MDOT Region Office in the formulation and implementation of traffic control measures for the affected area:

Traffic Control. The affected MDOT Region Office is responsible for traffic routing and regulation on state trunkline highways, including controlling traffic signals and providing the necessary traffic control devices. The MSP will assist in the formulation of these measures as appropriate.

Perimeter Control. Perimeter control is generally provided for in the local EOP and coordinated from the affected local EOC. Affected local road agencies must coordinate with the appropriate MDOT Region Office for closures and detouring involving the state trunkline system. The MSP will assist in the formulation of these measures as appropriate.

Evacuation Assistance. If requested, the MSP and the affected MDOT Region Office will assist local government in evacuation-related activities. (Refer to the MEMP Evacuation and Mass Shelter Support Plan.)

Provide monitoring team communications and transportation. The MSP Field Support Bureau will provide communications and transportation for the EGLE HPRTs (field teams) dispatched to the incident site for the purposes of radiological monitoring and field assessment. This capability will be provided through a radio-equipped MSP vehicle. Alternately, field teams can use non-MSP vehicles and communicate with the FTC via 800 MHz radio, with cellular telephone backup. In such cases, the MSP may not provide drivers. Transportation to the incident site may be provided via MSP aircraft or automobile (weather conditions, incident circumstances and resource availability will dictate the means selected).

Assist with rescue and law enforcement operations during hostile action incidents. The MSP Emergency Support Team will provide response support in the event of onsite hostage or terrorist activities in coordination with plant security, local police, the FBI, and other federal law enforcement agencies.

Provide aerial support to state emergency operations. The MSP Aviation Section can provide aircraft and pilots for incident response support missions, including but not limited to emergency transportation, aerial reconnaissance and photography of the incident area, and monitoring vehicle traffic flow during an evacuation.

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET (DTMB):
Protect employees and visitors at State-owned DTMB-managed facilities. If a nuclear incident affects State-owned DTMB-managed facilities within the Primary EPZ, the department will take appropriate steps to ensure that employees and visitors at those facilities are adequately protected from radiological exposure and aware of the protective actions being taken by the State and local government(s). Facility emergency procedures will be implemented as required. Facility managers are responsible for ensuring that personnel are properly trained and knowledgeable of emergency procedures.

Facility closures. If incident circumstances are such that closure of DTMB owned / managed facilities is required, the DTMB Director is authorized to close the affected facilities and grant administrative leave to the affected state employees. The authority to temporarily close facilities and provide administrative leave to state employees due to building closure rests exclusively with the DTMB Director, after appropriate consultation with the Governor's Office, pursuant to 1984 PA 431, as amended (Management and Budget Act), and the DTMB Administrative Manual, "General or Isolated Emergencies".
(This authority, however, does not extend to state correctional facilities and state institutions, which fall under the administrative purview of their respective department directors. State offices in leased buildings may be ordered closed by the DTMB Director and the affected state employees may be granted administrative leave; however, the DTMB Director does not have the authority to close a privately-owned building if there are other non-state tenants in the building. If state employees are the only tenants in a privately-owned, leased building, then the DTMB may have the authority to close and secure the building.)

Note: This authority, however, does not extend to state correctional facilities and state institutions, which fall under the administrative purview of their respective department directors. State <u>offices</u> in leased buildings may be ordered closed by the DTMB Director and the affected state employees may be granted administrative leave; however, the DTMB Director does not have the authority to close a privately-owned building if there are other non-state tenants in the building. If state employees are the <u>only</u> tenants in a privately-owned, leased building, then the DTMB may have the authority to close and secure the building.

MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT):
Coordinate with the USDOT for transportation response activities, including limiting or restricting air, rail, water, and vehicular traffic. In the event of an airborne release of radioactive material, the MDOT will:

- The MDOT EMC will coordinate with the USDOT Regional Emergency Transportation Coordinator (RETCO) or Regional Emergency Transportation Representative (RETRep).
- The RETCO/RETRep will coordinate response actions of the applicable federal transportation departments/agencies, such as the Federal Aviation Administration (FAA), FHWA, and Federal Railroad Administration (FRA).

- The RETCO/RETRep will liaison with the U.S. Coast Guard (USCG) and Transportation Security Administration (TSA), which are under the authority of the U.S. Department of Homeland Security.
- The MDOT EMC may also establish direct contact with applicable federal transportation agencies.

(Refer to the Public Works and Engineering ESF, MEMP Evacuation and Mass Shelter Support Plan, and MEMP Recovery Support Plan.) Provide state highway / trunkline traffic control measures, evacuation routing, and access control and perimeter points in coordination with the MSP and local jurisdictions. Assistance by the affected MDOT Region Office, MDOT support areas, and the MDOT EMC may include but is not limited to:

- Implementing/adjusting traffic signals, barricades, signage, message boards (fixed and portable), and other traffic management measures.
- Implementing road closure plans and emergency routing.
- Providing directions and information.
- Selecting evacuation routes with consideration of emergency needs, road capacity and condition, road design/geometry, bridge height clearances, potential choke points, and direction of evacuation.
- Identifying access control and perimeter points based on a range of factors, such as roadway design, functionality and capacity, speed of onset, hazards, impacts, etc.
- Addressing route hazards and determining detours around or removing potential impediments (e.g., construction zones).
- Assigning staff to access control and perimeter points in support of law enforcement.
- Providing maintenance services to support traffic mobility.
- Assessing conditions and monitoring traffic flow.

(Refer to the Public Works and Engineering ESF, MEMP Evacuation and Mass Shelter Support Plan, and MEMP Recovery Support Plan)

MICHIGAN DEPARTMENT OF TREASURY (MDT):
Provide immediate and long-term economic development and recovery assistance. The Michigan Finance Authority, an autonomous entity within the MDT, is one of 10 public finance authorities that issues loans to Michigan local units of government for various public purposes. The Authority's Local Government Loan Program provides loans for equipment purchases, building improvements, and public infrastructure needs (among other uses). This also includes coordinating with the Michigan Economic Development Corporation (MEDC), which has resources that can supplement the MDT's various programs to aid in economic recovery. (For example, the Rural Housing and Economic Development [RHED] Program, administered by the Michigan State Housing Development Authority [MSHDA], provides capacity-building and program grants to PNPs and public agencies supporting housing and community development in rural areas.) These programs, individually or in tandem, can help stabilize and enhance the economic posture of a Michigan community or region trying to recover from a major disaster or emergency. Depending on incident circumstances, some or all of these programs could potentially be utilized in the aftermath of a nuclear incident to support both short- and long-term economic recovery efforts. (Refer to the MEMP Recovery Support Plan.EMPLOYMENT & TRAINING (E&T):
Provide job training assistance to disaster survivors. The Workforce Development Authority (WDA) of the Employment & Training (E&T) can provide job training assistance to individuals whose livelihood was severely impacted or destroyed by the nuclear incident. Assistance can include job retraining and counseling, occupational information, and rehabilitation services. (Refer to the Human Services ESF.)

MICHIGAN JUDICIARY:
Protect employees and visitors at judicial facilities. If a nuclear incident affects state judicial facilities (including local courts) within the Primary EPZ, the State Court Administrative Office (SCAO) will take appropriate steps to ensure that employees and visitors at those facilities are adequately protected from radiological exposure and aware of the protective actions being taken by the State and local government(s). Facility emergency procedures will be implemented as required. Facility managers are responsible for ensuring that personnel are properly trained and knowledgeable of emergency procedures. If incident circumstances are such that closure of the affected judicial facilities is required, the SCAO will work with facility managers to close the facilities in accordance with provisions contained in the "Michigan Court Security Manual" and applicable local administrative orders and court rules.

OIL AND GAS WELL/PIPELINE ACCIDENTS – TECHNOLOGIC DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures in an oil and gas well/pipeline accident.

Types of and Oil and Gas Well/Pipeline Accident
Oil and natural gas well accidents may be caused by an uncontrolled release of oil, natural gas or the poisonous by-product hydrogen sulfide from production wells, or a fire or explosion at a production well. Petroleum and natural gas pipeline accidents typically are caused by a fracture, leak, or rupture to the pipeline, which can result in a fire, explosion or spill that causes property damage, environmental contamination, injuries and even loss of life.

Assessment
Assessment of an oil or gas well/pipeline accident will focus on determining the: 1) nature, location, scope, and magnitude of the accident; 2) actual and potential impacts to critical facilities and services in the affected area; and 3) physical damage (if any) to public and private structures. Assessment information will normally come from the affected local communities and state departments/agencies through the established emergency management system. Assessment information may also come directly from the affected company. The primary means of transmitting assessment information is the MI CIMS. The SEOC Planning Section will collect, compile, synthesize and analyze (with the assistance of involved state departments/agencies) the incoming assessment information. Recommendations for appropriate response and recovery actions will be made based on that assessment and other pertinent factors.

Notification
MSP/EMHSD notification of a significant oil or gas well/pipeline accident normally comes from local government via direct contact with the MSP/EMHSD District Coordinator, MSP Operations, and/or submittal of information in the MI CIMS. In some cases, notification may come directly from the affected drilling/pipeline company or the involved state department/agency (i.e., MPSC for pipelines; EGLE/OGMD for wells).

PASSENGER TRANSPORTATION ACCIDENTS –TECHNOLOGIC DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures in a passenger transportation accident disaster.

Description of Passenger Transportation Accident
A passenger transportation accident is a type of accident that may involve an air, land, or water-based commercial passenger carrier.

Types of Passenger Transpiration Accidents
Air Transportation Accident. There are four primary circumstances that can result in an air transportation accident: 1) an airliner colliding with another aircraft in the air; 2) an airliner crashing while in the cruise phase of a flight due to mechanical problems, sabotage, or other cause; 3) an airliner crashing while in the takeoff or landing phases of a flight or; 4) two or more airliners colliding with one another on the ground during staging or taxi operations.

Land Transportation Accident. A land transportation accident could involve a commercial intercity passenger bus, a local public transit bus, a school bus, or an intercity passenger train. Typically, bus accidents are caused by the bus slipping off a roadway in inclement weather or colliding with another vehicle. Intercity passenger train accidents usually involve a collision with a vehicle attempting to cross the railroad tracks before the train arrives at the crossing.

Water Transportation Accident. A water transportation accident would likely involve one of the commercial marine passenger ferry services operating from Michigan's Great Lakes shoreline communities.

Assessment
Assessment of a passenger transportation accident will focus on determining the: 1) nature, location, scope, and magnitude of the accident; 2) number of injuries and deaths; 3) property and environmental damage incurred; and 4) anticipated resource needs of the response and recovery operation. Assessment information will normally come from the affected local communities and/or state and federal departments/agencies through the established emergency management system. The primary means of transmitting assessment information is the MI CIMS. Assessment information may also come from the owner/operator of the involved passenger carrier, and through television, radio, web, social, and print media reports. The SEOC Planning Section will collect, compile, synthesize, and analyze the incoming assessment information. Recommendations for appropriate response and recovery actions will be made based on that assessment and other pertinent factors.

Notification
MSP/EMHSD notification of a significant passenger transportation accident normally comes from local government via direct contact with the MSP/EMHSD District Coordinator, MSP Operations, and/or submittal of information in the MI CIMS. In some cases, notification may come directly from the involved state or federal departments/agencies (e.g., MDOT, U.S. Coast Guard, Federal Aviation Administration, or Federal Railroad Administration). Notification may also come from television, radio, web, or social media reports.

Additional Resources:
- Aviation Disaster Family Assistance Act of 1996.
- Foreign Air Carrier Family Support Act of 1997.
- Rail Passenger Disaster Family Assistance Act of 2003.

PUBLIC HEALTH EMERGENCIES – HUMAN-RELATED DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures in during a public health emergency.

Description of Public Health Emergencies
Public health emergencies are often rooted in other defined hazards, and any hazard that jeopardizes human life may be loosely referred to by some as a public health emergency when taken broadly. As defined in the Michigan Hazard Analysis, and for purposes here, a public health emergency most typically takes the form of disease or contamination related emergencies. These include epidemics/pandemics, contaminated food/water, and the health impacts of inadequate sewer or water services. Public health emergencies can occur as primary events by themselves, or they may be secondary events to another disaster or emergency such as a flood, mosquito infestation, or chemical spill.

Notification
MSP/EMHSD notification of public health emergencies (actual/potential/anticipated) may come from:

1. Affected local governments via direct contact with the MSP/EMHSD District Coordinator, MSP Operations, and/or submittal of information in the MI CIMS.
2. Local health care providers and health departments via MDHHS-Health surveillance systems (e.g., Health Alert Network).
3. The MDARD or EGLE.
4. State and local human service agencies (e.g., MDHHS-Human Services, Area Agencies on Aging).
5. Media reports.

Assessment
Assessment information for public health emergencies will come primarily from state/local health agencies, human service agencies, and health care providers. The MDHHS-Health can provide information on the number of deaths and injuries, as reported by local hospitals and health care providers. In addition, the MDHHS-Health can work with the federal Centers for Disease Control and Prevention (CDC) to investigate the probable cause and extent of impact of the emergency and identify appropriate mitigative/preventive measures that could be employed. The MOSA can provide information on the impacts to the elderly, as reported by the network of Area Agencies on Aging. The MDHHS-Human Services can provide information on the impacts to individuals and family clients under their supervision (to the extent that such information is readily available), as reported by the county MDHHS offices. The MDARD–through its regulatory divisions and its contacts with the USDA, FDA, and the food industry–can provide information on incidents of food contamination or other food emergencies that have the potential to result in a widespread and/or severe public health emergency. The EGLE can provide information on public health emergencies that may have origin in public water distribution and/or wastewater treatment systems, or that involve harmful exposure to chemical, radiological or biological agents. State department/agency assessment information will be submitted via the MI CIMS.

Disaster-Specific Tasks: State Government
Department of Health and Human Services (MDHHS) – Human Services

1. Serve as lead state agency on human health issues. The MDHHS-Health and local/district health departments across the state have a wide array of programs and initiatives in place to protect the health, safety, and wellbeing of Michigan's residents. These programs and initiatives have been very successful in preventing or limiting the scope and magnitude of the types of public health emergencies addressed by this section. (Refer to the Health and Environmental Protection ESF.)
2. Coordinate the identification, investigation, and control of public health emergencies. MDHHS-Health primary activities include surveillance, rapid identification, risk communication, and coordination of rapid response to outbreaks of communicable diseases (especially epidemics), chemical incidents that pose a threat to human health, and other imminent dangers to public health. The MDHHS Director and local public health officers have the authority (under the Michigan Public Health Code–1978 PA 368, as amended) to take those steps determined necessary and prudent to prevent epidemics and the spread of hazardous communicable diseases, or to effectively mitigate other conditions or practices that constitute a menace to public health. The MDHHS Director and local public health officers can issue written orders to implement the required preventive steps and/or response, and those orders can be enforced through the imposition of civil and criminal penalties for failure to comply.

MDHHS - Aging and Adult Services Agency (AASA)

1. Conduct outreach to elderly residents on proper preventive measures. If a public health emergency occurs, the Area Agencies on Aging around the state can provide outreach to the elderly population on proper preventive measures to take. In addition, the AAAs can monitor the condition of elderly homebound residents and others that participate in AAA-sponsored programs and report any detected health problems to local health departments

for follow-up investigation. All relevant information from AAAs regarding preventive measures taken and/or the condition of the elderly population will be provided to the MSP/EMHSD via the MI CIMS by the AASA EMC. The information may also be submitted via the MI CIMS by the affected local emergency management program jurisdiction(s) as part of the local damage assessment summary.

ESSENTIAL RESOURCE SHORTAGES – HUMAN-RELATED DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures during an essential resource shortage disaster.

Description of a resource shortage disaster
Numerous forces can cause short- and long-term shortages to essential resources that may create an emergency situation. A shortage of food, drinking water, medicines, and other essential items–whether short-term or long-term–would be a primary concern that could require significant state and possibly federal assistance and intervention. While some such shortages are specifically addressed elsewhere (see below), this annex provides general information for consideration of essential resources shortages in general. A shortage of money caused by a temporary shutdown of financial institutions and systems could also quickly elevate to emergency status if it continued unabated for more than a few days. A shortage of cash is likely to first impact individuals with a low-income while a financial institution or system shutdown is likely to first impact those with a higher income.

War or other large-scale military operations, pandemics, shortages of raw materials, adverse weather conditions, market and economic forces, damage to critical manufacturing/production facilities, loss of electric power for an extended period, embargo by foreign suppliers, excessive demand, or any combinations of the above can help to create resource shortages.

Notification
MSP/EMHSD notification of a resource shortage (actual/potential/anticipated) affecting the entire state, or a significant portion of the state will most likely come via direct contact with involved state or federal departments/agencies, or from media reports. Notification of a significant (in-state) regional resource shortage will most likely come from affected local governments via direct contact with the MSP/EMHSD District Coordinator, MSP Operations, and/or submittal of information in the MI CIMS.

Assessment
Assessment information for a significant resource shortage will come primarily from involved state departments/agencies (e.g., MDARD for food shortages, MDHHS-Health for medicine shortages, EGLE for water shortages, etc.), working in conjunction with their federal counterpart departments/agencies and relevant trade/industry associations. Assessment efforts will focus on determining:

1. The nature, scope, magnitude, and expected duration of the shortage.
2. Potential impacts to the affected population.
3. Anticipated economic and social consequences.
4. Potential/anticipated impacts to critical facilities and services.
5. Anticipated state/federal assistance requirements.

Affected local governments will provide much of the information regarding specific local impacts (actual/potential /anticipated) in the MI CIMS. The SEOC Planning Section will collect, compile, synthesize, and analyze the incoming assessment information, per established procedure. (Refer to the Information and Planning ESF.)

General Response
The appropriate response to a resource shortage is dependent upon a number of factors, including but not limited to the:

1. The type and criticality of the resource of which there is a shortage.
2. Number of alternative sources for the resource.
3. Cost of alternative sources.
4. Anticipated timeframe for resource augmentation.
5. Number/nature of the persons/communities affected.
6. Anticipated social and economic costs of the shortage.

Possible response measures for resource shortages include but are not limited to:

1. Resource augmentation (procuring resources at normal or near-normal prices)
2. Market-based resource augmentation (procuring resources at the price the market will bear).
3. Identification of alternative types of resources (may not be possible in some cases).
4. Voluntary conservation measures (until the resource is widely available again).
5. Mandatory conservation measures (government imposed).

The response matrix below provides possible paths to consider when addressing shortages of several basic life support commodities. Refer to the Resource Support ESF for specific task assignments related to addressing shortages of these and other commodities.

Resource Shortage Decision Matrix for Basic Life Support Commodities

(Suggestions not all-inclusive or listed in any particular priority order. Table continued on next page.)

Response Measure: / Resource:	Resource Augmentation	Alternative Resources	Voluntary Conservation Measures	Mandatory Conservation Measures
DRINKING WATER	• MDMVA (water tankers) • Non-Affected Water Distribution Systems • Private Voluntary Agencies • Michigan Bottled Water Companies/Association • Michigan Soft Drink Bottling Companies/Association • Michigan Milk Producers/Association • Major Michigan Retailers • EMAC request • National Bottled Water Companies/Association • Association • National Milk Producers/Association • Major National Retailers • FEMA (NRF mission assignment)	• Portable Water Tankers • Bottled Water • Boil Water Advisories (where water is available but possibly contaminated) • Tapping into Non-Affected Water Distribution Systems • Temporary Water Distribution System • Water Substitutes (e.g., fruit juices, milk, other non-alcoholic beverages)	• Government Recommended Liquid Intake Guidelines (tailored for situation) • Government Recommended Water Use Guidelines (for all end users – residential, commercial, industrial, institutional, agricultural)	• Water Rationing (e.g., direct distribution by government, water rationing coupons) • Water Use Regulations (for all end users) • Legal Sanctions (for over-use / non-appropriate use / "hoarding" of water supply)
FOOD COMMODITIES	• Private Voluntary Agencies • FEMA (IA and/or NRF mission assignments) • Other Federal Agencies (e.g., USDA, school lunch program, MREs) • Michigan Food Companies/Industry Associations • National Food Companies/Industry Associations • EMAC request • International Agencies	• Substitute Food Selections (other types of food)	• Government Recommended Dietary Guidelines (tailored for situation)	• Government Food Rationing Coupons • Government Distribution of Commodities (direct) • Legal Sanctions (for over-use/"hoarding" of food commodities)
MEDICINE / MEDICAL SUPPLIES	• MDHHS-Health (MEDDRUN, MEPPP, MEMS) • MDHHS-Health/federal HHS (SNS activation) • FEMA (NRF mission assignment) • Private Voluntary Agencies • Michigan Medical Suppliers/Pharmaceutical Companies/Associations • National Medical Suppliers/Pharmaceutical Companies/Associations • EMAC request • International Medical Suppliers/Pharmaceutical Companies/Associations	• Substitute Medicine Selections (if medically possible)	• Voluntary Reduction of Non-Essential Medicine Intake (based on medical guidelines tailored for situation) • Postponement of Elective Surgeries/Non-Essential Medical Procedures	• Medicine Rationing (e.g., direct distribution by government, rationing coupons) • Medicine Use Regulations (for all user groups) • Legal Sanctions (for over-use/non-appropriate use/"hoarding")
BABY FORMULA / FOOD	• Private Voluntary Agencies • FEMA (IA and NRF mission assignment) • Other Federal Agencies (e.g., USDA) • Michigan Baby Food Companies/Industry Associations • National Baby Food Companies/Industry Associations • EMAC request • International Agencies	• Breast Feeding/Breast Milk • Properly Prepared Adult Food (pureed) • Alternate Vitamin Sources	• See "Alternative Resources" Column (no other credible alternatives)	• See "Alternative Resources" Column (no other credible alternatives)

Resource Shortage Decision Matrix for Basic Life Support Commodities (cont.)

(Suggestions not all-inclusive or listed in any particular priority order. Table continued from the previous page.)

Response Measure: / Resource:	Resource Augmentation	Alternative Resources	Voluntary Conservation Measures	Mandatory Conservation Measures*
MONEY	• FEMA (IA and NRF mission assignment) • Federal/State Oversight Agencies (banking/financial institutions) •	• Credit Cards/Debit Cards • Temporary Credit • Government Supplied Basic Commodities (minimize need for cash for basic life support items)	• Personal/Family Preparedness Kit (minimize need for cash for basic life support items) • Ready Cash Reserve (small amount at home for emergencies)	• See "Alternative Resources" and "Voluntary Conservation Measures" Columns (no other credible alternatives)
HOUSING (TEMPORARY)	• FEMA (IA and NRF mission assignment) • Private Voluntary Agencies and MDHHS-Human Services (shelters, private homes) • MDHHS/MOSA (unused space at senior centers) • Hotels and Motels/Associations (Michigan, adjacent states, nationwide) • Colleges/Universities (dormitory rooms, other available space) • Schools – Local, Intermediate, State • Churches/Church Associations • MDNR (state park cabins, campgrounds) • MDARD (vacant migrant worker housing) • County Fairgrounds (vacant space in buildings, camping) • MDOC (unused space in state correctional facilities) • MDHHS-Health (unused space at state inpatient mental health facilities) • DTMB (vacant/underutilized space in state facilities) • Major Sports Arenas/Convention Centers/Community Centers • DTMB (vacant warehouses and office/commercial buildings) • MDMVA (military bases/armories) • Large Shopping Malls • MDOT (airport hangars/unused space at airports)	• Hotels and Motels • Private Homes • College Dormitories • Schools • State Parks • State/County Fairgrounds (arenas, buildings) • Correctional Facilities (unused space) • Inpatient Mental Health Facilities (unused space) • Other State Facilities (vacant/underutilized) • Sports Arenas • Convention Centers • Community Centers • Senior Centers • Office/Commercial Buildings and Warehouses (vacant) • Military Bases/Armories • Large Shopping Malls • Temporary Manufactured Home/RV Parks • Cruise Ships in Great Lakes • "Tent Cities"/Use of Other Expedient Shelter Options • Churches • Airport Hangars (vacant) • Vehicles (last resort only)	• Private Home Sharing • Voluntary Cancellation of Hotel/Motel Reservations • Voluntary Evacuation to Another State/Non-Affected Area • Tax Incentives/Other Reimbursement for Provision of Temporary Shelter	• Cancellation of School/College and University Classes and Activities • Cancellation of Hotel/Motel Reservations • Cancellation of State Park Reservations • Cancellation of State Fair/County Fairs • Early Release of Non-Violent Prisoners from State Correctional Facilities • Cancellation of Sports Contests and Other Events at Major Arenas/Convention Centers/Community Centers • Redirecting/Relocating Activities from Other Needed State and Local Facilities • Postponement of Non-Essential Military Operations at Training Bases/Armories • Temporary Closure/Use of Private Facilities

SEVERE STORMS (HIGH WIND) – NATURAL DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures during a high wind disaster.

Description of Severe Storms (High Wind)
This section addresses general conditions of high winds (commonly known as "windstorms") that are not associated with a thunderstorm but nonetheless threaten life and may cause significant property, environmental, and agricultural damage. Tornadoes also produce high winds. Especially during the spring and summer months, it is worth noting that high winds associated with thunderstorms may also produce lighting and hail damage.

Notification
Notification of severe storms typically comes from one or more of the five NWS stations serving Michigan (Detroit, Gaylord, Grand Rapids, Marquette, and Northern Indiana). State and local government agencies may receive information via the LEIN, NOAA Weather Wire and Weather Radio, and the Emergency Managers Weather Information Network (EMWIN). NWS forecasts and severe weather notifications are also widely broadcast by the media, and through the Interactive Weather Information Network (IWIN) and the five NWS station web sites.

MSP/EMHSD notification of damaging severe storms normally comes from local government via direct contact with the MSP/EMHSD District Coordinator, contact with the MSP Operations, and/or submittal of information in the MI CIMS. Notification may also come from affected MSP Posts, which are required (by MSP Official Order No. 3) to report to the MSP/EMHSD if an emergency or disaster occurs within their jurisdictional boundary. In some cases, notification may come directly from involved state and/or federal departments/agencies (e.g., MDLARA, MDARD, NWS, etc.). AUXCOMM volunteers in most counties provide on the ground observations to their local EOC and NWS office. These spotters are activated by the NWS when severe storms are anticipated.

Assessment
Assessment of a severe storm will focus primarily on determining the: 1) location, scope, and magnitude of the storm; 2) number of injuries and deaths; 3) property, environmental, and agricultural damage incurred; 4) impacts to critical facilities and services; 5) economic and social consequences (actual/potential/anticipated); and 6) anticipated resource needs of the response and recovery operation. The primary means of transmitting assessment information to the SEOC is the MI CIMS. The SEOC Planning Section will collect, compile, synthesize, and analyze the incoming assessment information, per established procedure. (Refer to the Information and Planning ESF for more details on reporting forms and processes.) For widespread and/or particularly severe storm damage, the MSP/EMHSD District Coordinators will identify damage assessment needs at the local level and work with the SEOC Recovery Section to coordinate assessment activities as needed.

SUBSIDENCE – NATURAL DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures in a subsidence disaster.

Description of Subsidence Disaster
Subsidence – the lowering or collapse of the land surface – can be caused by a variety of natural or human-induced activities that erode or remove subsurface support. Natural subsidence occurs when the ground collapses into underground cavities produced by the solution of limestone or other soluble materials by groundwater. Human-induced subsidence is caused principally by groundwater withdrawal, drainage of organic soils, and underground mining. In Michigan, the primary cause of subsidence is underground mining.

Assessment
Assessment of a subsidence incident will focus on determining the: 1) nature, location, scope, magnitude and expected duration of the incident; 2) actual and potential impacts to critical facilities and services in the affected area; and 3) physical damages (if any) to public and private structures. Assessment information will normally come from the affected local communities and/or the EGLE/OGMD through the established emergency management system. The primary means of transmitting assessment information is the MI CIMS. The SEOC Planning Section will collect, compile, synthesize and analyze the incoming assessment information. Recommendations for appropriate response and recovery actions will be made based on that assessment and other pertinent factors. (Refer to the Information and Planning ESF for more details on reporting forms and processes.)

Notification
MSP/EMHSD notification of a significant subsidence incident normally comes from local government via direct contact with the MSP/EMHSD District Coordinator and/or submittal of information in the MI CIMS. In some cases, notification may come directly from the EGLE/OGMD.

WIDESPREAD PLANT OR ANIMAL DISEASE – NATURAL DISASTER

In addition to the general task assignments and procedures listed in the various ESF's, consider the following tasks and procedures during a widespread plant or animal disaster.

Description of a Plant or Animal Disaster
Michigan is potentially vulnerable to a major outbreak of a wide range of plant and animal diseases. If such an outbreak were to occur, it could not only cripple major segments of the state's hunting, agriculture, and tourism industries, but also could create the need for coordination with law enforcement and other agencies to enforce and maintain quarantines (of a regional or statewide nature). These response operations would necessarily involve the emergency management system due to their potential size and complexity, the number of agencies involved, and the inherent public health risks associated with diseased and/or dead animals.

The MDARD, MDHHS-Health, and MDNR have in place many programs and initiatives to prevent/mitigate a widespread plant or animal disease outbreak. Disease and contamination outbreaks and other catastrophic events involving plant and animal populations can occur at any time, even with the best preventive measures in place. Examples include Michigan's 1973-1974, polybrominated biphenyl (PBB) statewide contamination incident that resulted in the deaths of tens of thousands of cattle; the outbreaks of Bovine Spongiform Encephalopathy ("Mad Cow") and Foot and Mouth Disease in Great Britain; and Michigan's ongoing struggles with Bovine Tuberculosis, Chronic Wasting Disease, West Nile Virus, as well as the Emerald Ash Borer, Plum Pox, and the Hemlock Wooly Adelgid. These events provide examples of what can happen given the right set of circumstances.

A regional or statewide disease outbreak involving the state's livestock and/or wildlife populations would probably pose the greatest threat to public health due to animal diseases that can pass directly to humans, such as avian influenza, or to the potentially large numbers of dead or dying animals that would have to be properly disposed of to prevent the spread of disease to humans from animal carcasses. A major plant disease outbreak would not likely have much impact on public health, but it could have a devastating effect on the state's agricultural production and create a large debris management problem that could potentially require significant resources to address.

Notification
Agricultural Plant or Animal Disease. MSP/EMHSD notification of a significant agricultural plant or animal disease outbreak will likely come from the MDARD, which will obtain the information (over a period of several weeks to possibly several months) from one or more of the following: MDARD inspectors, USDA, MSU Extension, other federal and state agricultural agencies, Michigan Emergency Veterinary Network ("Vet Net"), and farmers and agricultural enterprises.

Natural Vegetation or Wildlife. MSP/EMHSD notification of a significant disease outbreak affecting natural vegetation or wildlife will likely come from the MDNR, which will obtain the information (over a period of several weeks to possibly several months) from one or more of the following: MDNR field staff; USDA/Forest Service, MSU Extension, other federal and state natural resource agencies, and hunters, farmers, and forestry enterprises.

Assessment
Assessment of a widespread plant or animal disease outbreak will likely take place over a period of several weeks to possibly several months–depending on the plant or animal involved, the time of year, the size and rate of spread of the outbreak, and a number of other factors. The assessment will focus primarily on determining the: 1) location, nature, scope, and magnitude of the outbreak; 2) amount of damage that has occurred and has the potential to occur; 3) risks (actual/potential/anticipated) to public health and safety; and 4) anticipated resource needs of the response/recovery operation–with particular emphasis on debris management requirements.

The primary means of transmitting local and state assessment information to the SEOC is the MI CIMS. The primary means of transmitting agricultural damage assessment information are the USDA "Flash Situation Report" and "Damage Assessment Report", both of which are prepared by County Agricultural Emergency Boards and forwarded to the USDA State (of Michigan) Emergency Board in East Lansing for verification, summarization, concurrence, and distribution. The MDARD forwards the USDA agricultural damage assessment information to the SEOC. The SEOC Planning Section will collect, compile, synthesize, and analyze the incoming assessment information, per established procedure. (Refer to the Information and Planning ESF for more details on reporting forms and processes.)

Disaster-Specific Tasks: State Government
Michigan Department of Agriculture and Rural Development (MDARD)

1. Provide technical assistance to prevent and mitigate the additional spread of disease and the impacts of disease on plants, livestock, humans, and the environment.

2. *Plants.* Depending on the disease and plant involved, the MDARD will (in conjunction with the USDA, MSU Extension, and other agencies) take appropriate regulatory actions and provide technical advice and assistance to farmers, agricultural enterprises, as well as non-farm property owners, to prevent and mitigate the potential for severe damage to plants from disease and to stop its spread. (In urban and suburban areas, such actions will require a high degree of cooperation with local governments as well as an aggressive and comprehensive public information campaign.) Possible techniques include but are not limited to:
    a. Quarantine of affected vegetation within the impacted areas.
    b. Providing appropriate sanitation and disposal options.
    c. Using chemical and/or biological treatments to eradicate or control the disease.
    d. Instituting an aggressive and comprehensive public education campaign.
    e. Encouraging plant/crop diversity in new plantings.
    f. Practicing sound tree/plant care techniques.
    g. Any effective combination of these techniques.
3. *Livestock.* If an animal disease primarily involves or affects livestock, the MDARD will (in conjunction with the USDA, MSU Extension, and other agencies) take appropriate regulatory actions and provide technical advice and assistance to farmers, livestock dealers, veterinarians, truckers, livestock sales and auction markets, and other agricultural enterprises to prevent and mitigate the potential for livestock deaths from disease and to stop its spread. Possible techniques include but are not limited to:
    a. Quarantine of affected areas and the movement of livestock and carcasses from affected areas.
    b. Restrictions on livestock imports.
    c. Providing appropriate sanitation and disposal options for diseased/dead animals.
    d. Instituting a comprehensive surveillance.
    e. Testing and vaccination program (if applicable) to eradicate or control the disease.
    f. Instituting an aggressive and comprehensive public education campaign.
    g. Instituting a depopulation program targeted at infected, exposed, or suspect animals.
    h. Any effective combination of these techniques.
4. Coordinate agricultural crop and livestock debris disposal and management operations.
    a. Crops. The MDARD will normally coordinate debris disposal and management operations that involve agricultural crops (field crops, nursery stock, fruit trees, etc.), working in conjunction with the affected farmers and agricultural enterprises, the USDA, MSU Extension, and other agricultural agencies. Debris disposal and management operations that involve very large quantities of vegetation or more than one type of vegetation, or that require interaction and coordination with multiple agencies and levels of government, may be handled in conjunction with the MSP/EMHSD.
    b. Livestock. The MDARD will be the lead coordinating agency for livestock debris disposal and management operations, working in conjunction with the affected farmers and agricultural enterprises, the USDA, MSU Extension, the EGLE and MDHHS-Health, and other agencies. Livestock disposal and management operations that involve a large number of livestock may be handled in conjunction with the MSP/EMHSD.
5. Provide current information on quarantines and infestation-damaged farms and agricultural attractions in Michigan. The MDARD, working in conjunction with the MDNR and Michigan Travel and Tourism Office (part of the MEDC), will provide potential tourists with up-to-date information on “U-pick” farms, animal farms, wineries, nurseries, orchards, and other agricultural attractions that have been severely affected by plant or animal disease. (Refer to the Information and Planning ESF.)
6. Coordinate Receipt of the National Veterinary Stockpile. In the event of an outbreak of a number of animal diseases of high consequence, the U.S. Department of Agriculture may provide resources through the National Veterinary Stockpile. MDARD, with assistance from other agencies, would coordinate receipt of these materials.

Department of Military and Veteran Affairs (DMVA)
Medical and Engineering Support Task Assignments:
1. Assist federal, state, local, and tribal public health and medical authorities with epidemic surveillance and coordination.
2. Assist with disposal of animals.
3. Assist authorities with the implementation of necessary public health measures, such as isolating infected animals and restricting population movement inside and outside the quarantine area, to further reduce opportunities for transmission of disease.

Department of Natural Resources (MDNR)
1. Provide technical assistance to prevent and mitigate the impacts of disease on forests and wildlife.
    a. *Forests.* If a plant disease primarily involves or affects trees in forested lands, the MDNR will (in conjunction with the USDA/Forest Service, MSU Extension, and other agencies) provide technical advice and assistance

to landowners and forestry enterprises to prevent and mitigate the potential for severe tree damage from disease and to stop its spread. Possible techniques include but are not limited to:

i. Quarantine of affected trees and tree products within the impacted areas.
ii. Providing appropriate sanitation and disposal options.
iii. Using chemical and/or biological treatments to eradicate or control the disease.
iv. Instituting an aggressive and comprehensive public education campaign.
v. Encouraging diversity in new tree plantings.
vi. Practicing sound tree care techniques.
vii. Any effective combination of these techniques.

b. *Wildlife.* If an animal disease primarily involves or affects wildlife, the MDNR will (in conjunction with the U.S. Fish and Wildlife Service and other agencies) provide technical advice and assistance to landowners, farmers, hunters, and other involved individuals to prevent and mitigate the potential for animal death from disease and to stop its spread. Possible techniques include but are not limited to:

i. Quarantine of affected areas and the movement of carcasses from affected areas.
ii. Restrictions on the movement of live animals and carcasses from affected areas.
iii. Restrictions on baiting and feeding activities.
iv. Providing appropriate sanitation and disposal options for diseased/dead animals.
v. Instituting a comprehensive surveillance, testing, and vaccination program (if applicable) to eradicate or control the disease.
vi. Instituting an aggressive and comprehensive public education campaign.
vii. Instituting a depopulation program targeted at infected animals.
viii. Any effective combination of these techniques.

2. Coordinate forest and wildlife debris disposal and management operations.

a. *Trees.* The MDNR will normally coordinate debris disposal and management operations that involve infested trees in state forest lands and adjacent lands, working in conjunction with the affected landowners, the USDA/Forest Service, MSU Extension, and other agencies. Debris disposal and management operations that involve large quantities of trees or more than one type of vegetation, or that require interaction and coordination with multiple agencies and levels of government, may be handled in conjunction with the MSP/EMHSD.

b. *Wildlife.* The MDNR will be the lead coordinating agency for wildlife debris disposal and management operations, working in conjunction with the affected landowners, the U.S. Fish and Wildlife Service, MSU Extension, hunting and fishing organizations (as appropriate), the EGLE and MDHHS-Health, and other agencies. Wildlife disposal and management operations that involve a large number of animals may be handled in conjunction with the MSP/EMHSD.

3. Provide current information on disease-damaged forest lands and wildlife in Michigan. The MDNR, working in conjunction with the Michigan Travel and Tourism Office (part of the MEDC), will provide potential tourists with up-to-date information on state parks and recreation areas, forest lands, campgrounds, and other natural areas that have been severely affected by plant or animal disease.

ADDITIONAL SUPPORT APPENDICES

APPENDIX I: STATE SUPPORT PLAN LIST AND DESCRIPTIONS

This document provides a listing of plans under the stewardship of MSP/EMHSD. The public plans listed below can be found on the Michigan State Police website under Emergency Management Homeland Security Division Publications (https://www.michigan.gov/msp/0,4643,7-123-72297_60152_69727_73631---,00.html). Plans listed below that are not public are maintained by the MSP/EMHSD staff.

State Disaster Plan and Support Documents

- 101 Michigan Emergency Management Plan
- 101b MEMP Evacuation and Mass Shelter Support Plan
- 101c MEMP Animal Care Support Plan
- 101d MEMP Recovery Support Plan
- 102 Michigan Emergency Management Act
- 103 Michigan Hazard Analysis
- 104 State Department EM Coordinator Handbook
- 106 Michigan Hazard Mitigation Plan
- 106a Best Practices in Hazard Mitigation: Michigan Success Stories
- 109 Michigan Disaster Debris Management Plan
- 110a Local Continuity of Operations Planning Handbook and Plan Template

Local Emergency Planning Workbook and Guidance

- 107a Local Disaster Logistics and Donations Management Planning Handbook and Plan Template
- 109a Local Disaster Debris Management Planning Handbook and Plan Template
- 110a Local Continuity of Operations Planning Handbook and Plan Template
- 113 Local Evacuation and Mass Care Planning Handbook and Plan Template
- 114 Local Recovery Planning Handbook and Plan Template
- 201 Local Emergency Planning Workbook
- 201a Review Guide for Local Emergency Plans
- 204 Local Support Plan Guidance
- 206 Local Emergency Management Standards
- 207 Local Hazard Mitigation Planning Workbook
- 208 Emergency Management Performance Grant (EMPG) Guidebook
- 305 LEPCs: Organizing for Success
- 308 SARA Title III & Michigan Fire Fighter R2K Planning Guidance for Community Hazmat Response Plans

Emergency Management Training Guidance

- 702 Training and Exercise (T&E) Guidebook

Other Emergency Management Guidance

- 901 Michigan Damage Assessment Handbook
- 903 Public Assistance Grant Program Applicant Handbook

Documents Not for Publication

- 005 SOM Administrative Plan PA Grant Program
- 007 SOM Administrative Plan HMGP
- 011 SOM Disaster and Emergency Contingency Fund, Emergency Management Act Section 19 Applicant Guidebook
- 110 Michigan Continuity of Government Plan
- 110 Michigan Continuity of Operations Plan
- 111 Michigan Emergency Repatriation Plan

101 Michigan Emergency Management Plan (MEMP) - Current Edition 2016

The purpose of the Michigan Emergency Management Plan is to provide an organizational and operational framework to enable the State of Michigan to mitigate, prepare for, prevent, respond to, and recover from emergencies, disasters, threats, or incidents – actual, imminent, or potential – that could adversely impact the State of Michigan. The MEMP also provides for enhanced coordination between and among governmental departments/agencies at all levels (federal, state, local), between the State and tribal governments, and between the State and nongovernmental organizations (NGOs) involved in emergency management and homeland security activities. The ultimate purposes of the plan are to:

1) Protect the safety, health, and general well-being of Michigan's residents and visitors from natural, technological, weapon of mass destruction attack, and human-related hazards occurring in or otherwise impacting the State of Michigan.
2) Protect property and the environment to the extent possible.
3) Ensure that critical services can be provided in a timely and unencumbered manner.

101b MEMP Evacuation and Mass Shelter Support Plan – Current Edition 2014
This plan describes the resources, capabilities, and technical expertise of Michigan's state departments/agencies and involved nongovernmental relief organizations (NGOs) in providing:

1) Supplemental support services to local government evacuation and mass shelter operations during a disaster or emergency in Michigan that results in the need to evacuate and provide shelter and care for large numbers of individuals.
2) Primary support services for evacuation and mass shelter operations in which evacuees from other states are relocated to Michigan for an extended period. Although evacuation and mass sheltering are inherently local government functions, large-scale evacuation and mass shelter operations will generally require state support.

This plan is intended to be consistent with and support evacuation and mass shelter functions described in local Emergency Operations Plans (EOPs) and Emergency Action Guidelines (EAGs) and separate, stand-alone Evacuation and Mass Shelter Plans. It is also consistent with and supports a number of ESFs and Disaster-Specific Procedures found in the MEMP.

101c MEMP Animal Care Support Plan – Current Edition 2014
The MEMP Animal Care Support Plan addresses two separate but related tracks:

1) Animals impacted by disease or contamination.
2) Animal issues during a disaster.

The plan provides an organizational and operational framework for improving the public and private sector response to animal diseases and animal disasters within or affecting Michigan. It is consistent and compatible with the National Incident Management System (NIMS) and National Response Framework (NRF) and meets current applicable planning standards under the Emergency Management Accreditation Program (EMAP).

101d MEMP Recovery Support Plan – Current Edition 2014
The plan provides an organizational and operational framework for improving public and private sector short-term recovery efforts aimed at making an area safe for reentry and reuse, as well as longer-term recovery efforts aimed at rebuilding and/or restoring affected areas to their pre-incident condition. The plan addresses the following recovery functions from both short-term and long-term time frames: critical infrastructure restoration; housing; economic stabilization; individual and family services; essential governmental services; and environmental restoration. The MEMP Recovery Support Plan is consistent and compatible with the National Incident Management System (NIMS) and National Response Framework (NRF) and meets current applicable planning standards under the Emergency Management Accreditation Program (EMAP).

102 Michigan Emergency Management Act, Public Act 390 – Current Edition 2018
An Act to provide for planning, mitigation, response, and recovery from natural and human-made disaster within and outside this state; to create the Michigan emergency management advisory council and prescribe its powers and duties; to prescribe the powers and duties of certain state and local agencies and officials; to prescribe immunities and liabilities; to provide for the acceptance of gifts; to repeal acts and parts of acts.

103 Michigan Hazard Analysis – Current Edition 2012
This document supports local hazard analyses and hazard mitigation planning processes by providing information about the most likely threats, hazards, and vulnerabilities within the state; the historic impacts of incidents caused by these threats and hazards; and the policies and programs available to research, prepare for, and mitigate these incidents. This document acts as a scientific, historic, and active guidance document that identifies threats, hazards, and vulnerabilities within the State of Michigan.

104 State Department EM Coordinator Handbook – Current Edition 2007
This handbook provides a comprehensive overview of the emergency management and homeland security system in place in Michigan, as well as the primary roles, duties, and responsibilities of departmental EMCs. The handbook also describes the organization and structure of the MEMP and its supporting plans and procedures, and the responsibilities of departmental EMCs with regard to maintaining and revising those various planning documents. It also provides guidance on the responsibilities of state departments in developing, implementing, monitoring, and managing projects and grants under the federal Homeland Security Grant Program (HSGP) in support of the State Homeland Security Strategy (SHSS). It is intended that this handbook be used in concert with the MEMP, supporting emergency management and homeland security guidance materials, and training provided by the MSP/EMHSD and others to provide departmental EMCs with a

comprehensive overview of their responsibilities before, during, and after disasters, emergencies, and threats to the homeland. Each state department in Michigan must have a designated emergency management coordinator (EMC). The department director serves as EMC unless a designated representative is appointed or employed to serve as EMC for said state department.

106 Michigan Hazard Mitigation Plan – Current Edition 2014
This plan updates and builds upon the Michigan Hazard Analysis, which identifies the most likely and most severe effects of hazards identified in Michigan, to propose hazard mitigation strategies at the level of state agencies and their partners. The plan is a requirement for several types of federal funds, and represents the planned activities of multiple Michigan agencies, in coordination with the MCCERCC.

106a Best Practices in Hazard Mitigation: Michigan Success Stories – Current Edition 2011
This publication demonstrates the effectiveness of Michigan's state departments, local and tribal governments, and nongovernmental organizations in activities to permanently reduce loss of life, property, and environmental quality caused by hazards in Michigan. The success stories highlighted in this document provide models for future hazard mitigation efforts at all levels of government and in the private sector.

109 Michigan Disaster Debris Management Plan – Current Edition 2008
The Michigan Disaster Debris Management Plan is an organizational and operational framework for the State of Michigan to assist affected local jurisdictions in managing a debris operation subsequent to a debris generating disaster. The efficient and rapid management of disaster debris will help to protect the health and safety of the affected population, minimize threats to the environment, and ensure that critical response and recovery activities can proceed in a timely and unencumbered manner.

107a Local Disaster Logistics and Donations Management Planning Handbook and Plan Template – Current Edition 2012
This plan provides an organizational and operational framework and template for local jurisdictions to assess the need for, request, receive, and distribute disaster relief supplies, equipment, other material, and technical assistance, as well as donations necessary to respond to and recover from natural and human-caused disasters and emergencies, including acts of terrorism. It is based on the generally accepted logistics management goal of delivering the right items, in the right quantities, at the right time and price, to the right end users.

109a Local Disaster Debris Management Planning Handbook and Plan Template – Current Edition 2008
This Disaster Debris Management Plan is based on the basic waste management approach of reduction, reuse, and reclamation. It provides an organizational and operational framework to manage the clearance, separation, removal, storage, reduction, and disposal of disaster debris subsequent to a large-scale debris generating disaster within jurisdictions. The efficient and rapid management of disaster debris will help to protect the health and safety of residents and visitors, minimize threats to the environment, and ensure that critical response and recovery activities can proceed in a timely and unencumbered manner.

110a Local Continuity of Operations Planning Handbook and Plan Template - Current Edition 2012
This plan provides an organizational and operational framework to ensure the continuation of Constitutional and legal governance within local jurisdictions subsequent to a catastrophic disaster, emergency, or other incident. This plan addresses all three branches (Executive, Judicial, and Legislative) of local government, and the necessary support functions within them.

113 Local Evacuation and Mass Care Planning Handbook and Plan Template – Current Edition 2013
This plan template describes the resources, capabilities, and technical expertise of local jurisdictions, the American Red Cross (ARC), area nongovernmental relief organizations (NGOs), and the State of Michigan in providing evacuation and mass care operations for large numbers of people and animals during a disaster or emergency; and evacuation and mass care operations when evacuees from other states are relocated to a Michigan jurisdiction for an extended period. Such operations and multi-jurisdictional operations will generally require state support. This plan template supports evacuation and mass care functions described in the local jurisdiction's Emergency Operations Plan (EOP) and the State of Michigan Evacuation/Mass Sheltering Plan and the ESFs and Disaster-Specific Procedures found in the MEMP.

114 Local Recovery Plan Template – Current Edition 2015
The Local Recovery Support Plan Template, which is based on EMHSD Publication 101d, MEMP Recovery Support Plan, provides a resource for local Emergency Management programs that want to plan for incident recovery and describe the recovery capabilities of their whole community. This template outlines organizational structures necessary to ensure coordination between recovery stakeholders. It establishes the concept of a Long-Term Recovery Task Force (LRTF) as a structure to organize government stakeholders, it clarifies the relationship of the LTRTF to Long Term Recovery Groups

(LTRGs), which are commonly established by local VOADs, and driven by the participating nonprofit organizations. Additional guidance regarding local recovery planning is available in the FEMA Publication FD 008-03, Pre-Disaster Guidance for Local Governments.

201 Local Emergency Planning Workbook – Current Edition 2009
This Local Emergency Planning Workbook provides the basis for establishing, enhancing, and implementing a community's emergency management program and capabilities. It promotes a common understanding of the fundamentals of planning and decision-making to help emergency managers examine a threat or hazard and produce integrated, coordinated, and efficient response capabilities. Its purpose is to assist local emergency management coordinators (EMCs) and planners in gathering information about (1) how the program functions; (2) the community it serves; and (3) identifying the hazards that may affect them. The workbook allows a planning team to develop a "basic plan" as a foundation for an overall emergency response plan.

201a Review Guide for Local Emergency Plans – Current Edition 2014
This guide consists of a list of items required in planning considerations common to all hazards.

204 Local Support Plan Guidance – Current Edition 2015
This document is a guide for municipalities with a population of 10,000 residents or above that have elected to incorporate into the County Emergency Management Program and need to develop a Support Emergency Operations Plan (EOP) following the Administrative Rules for Section 19, 1976 PA 390, as amended. The Support EOP shall be consistent with the County Emergency Operations Plan and will become part of the county plan.

206 Local Emergency Management Standards – Current Edition 2011
This workbook is intended for local or inter-jurisdictional emergency management programs as a guide for measuring its status in relation to acceptable emergency management standards. It provides a means for strategic improvement of emergency management programs striving to attain a standard of excellence.

207 Local Hazard Mitigation Planning Workbook – Current Edition 2003
A local hazard mitigation plan is a document that is developed for and adopted by a community and describes the ways that community will be protected from the hazards that may affect it. This workbook provides information to enable a community to create a local hazard mitigation plan to reduce future damage caused by hazards. Such damage may either be physical harm affecting persons, property, and the natural environment in the community, or it may be something that interferes with the community's economy and quality of life.

208 Emergency Management Performance Grant (EMPG) Guidebook – Current Edition 2021
The purpose of the Emergency Management Performance Grant (EMPG) Guidebook is to provide information to local EMPG-funded emergency management programs on the policies and processes associated with receipt of EMPG funds awarded to the EMHSD through the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), and Grant Programs Directorate.

305 LEPCs: Organizing for Success – Current Edition 2018
This document acts as a guide for Local Emergency Planning Committees (LEPC) regarding their roles and responsibilities in maintaining the Community Right to Know provisions of SARA Title III and the safety and security of facilities which store, use, or create hazardous materials.

308 SARA Title III & Michigan Fire Fighter R2K Planning Guidance for Community Hazmat Response Plans – Current Edition 2008
This guidance assists fire departments and LEPCs in completing their planning tasks. SARA Title III requires LEPCs to develop site specific emergency response plans for those sites within their jurisdiction which have one or more "extremely hazardous substances" (EHS) at or above a given threshold quantity. Michigan Fire Fighter Right to Know (FFRTK) requires that the chief of an organized fire department prepare and disseminate to each firefighter a plan for executing the department's responsibilities with respect to each site within their jurisdiction where hazardous chemicals are used or produced. Hazardous Waste Operations and Emergency Response (HAZWOPER) requires employers (fire departments, in this case) to train all employees who may encounter or respond to a hazardous material incident. All three of these legislative requirements have planning specifications that are similar or overlap.

702 Training and Exercise (T&E) Guidebook – Current Edition 2017
This comprehensive Training and Exercise Guidebook is a supplemental guidance for whole community partners. The purpose of this document is to provide detailed information on how training and exercise functions in the state of Michigan, in accordance with federal grant programs and state requirements per Public Act 390 of 1976, as amended.

901 Michigan Damage Assessment Handbook – Current Edition 2019
This document informs local jurisdictions, stakeholders, and other agencies that may become involved with damage assessment of effective methods of creating organized systems for gathering, evaluating, and disseminating damage assessment information. Damage assessment is defined as the systematic process of determining and appraising the nature and extent of the loss, suffering, or harm resulting from a disaster or emergency. Damage assessment is concerned with determining what happened, when, where, how, and who is affected.

903 Public Assistance Grant Program Applicant Handbook – Current Edition 2002
This handbook provides a comprehensive overview of the PAGP and should be used in concert with other appropriate informational documents to ensure proper project and program management. Under The Robert T. Stafford Disaster Relief and Emergency Assistance Act (P.L. 93-288, as amended), a Public Assistance Grant Program (PAGP) is authorized to assist communities in restoring, repairing, or replacing public and certain private, non-profit facilities and services which are damaged or destroyed by a disaster. Grants are provided on a 75% Federal - 25% State/local basis.

005 SOM Administrative Plan PA Grant Program - Current Edition 2021
This document should not be published publicly.
The Michigan State Police, Emergency Management and Homeland Security Division (MSP/EMHSD) is the state agency responsible for managing and administering the Public Assistance Grant Program (PAGP), as provided for in the Michigan Emergency Management Act (Public Act 390 of 1976, as amended). The purpose of the State of Michigan PAGP Administrative Plan is to define and assign the policies, procedures, responsibilities, and methods for implementation of the PAGP in the state of Michigan after the declaration of a major disaster or emergency by the President. The plan also works to assure the Federal Emergency Management Agency (FEMA) that the state will comply with all applicable Federal statutes and regulations in effect during the periods for which it receives grant funding. The State acknowledges funding under the PAGP is conditional upon the State's compliance with all terms and conditions of this plan.

007 SOM Administrative Plan HMGP - Current Edition 2015
This document should not be published publicly.
The Hazard Mitigation Grant Program Administrative Plan is a procedural guide that details how the State of Michigan will administer HMGP. A plan must be approved by FEMA as a requirement for receiving HMGP funding. The plan details and assigns the policies, procedures, responsibilities, and methods of implementation of the HMGP in Michigan including staffing requirements and resources, application process, project implementation, and programmatic and financial closeout procedures for HMGP grants.

011 SOM Disaster and Emergency Contingency Fund, Emergency Management Act Section 19 Applicant Guidebook. – Current Edition 2019
This document explains the application process for the State Disaster Assistance program detailed in the Michigan Emergency Management Act, Section 19 of PA 390. This is commonly referred to as Section 19 funding, as is available when:

a) A disaster or emergency exhausts a local jurisdiction's resources and response capabilities.
b) The impacted jurisdiction as experienced an extraordinary financial burden.
c) When the Governor of Michigan declares a state of emergency or disaster.
d) No federal funding becomes available to respond to the disaster due to a lack of a federal declaration.

These grants may not exceed the following thresholds:

- A county or municipality with a population under 25,000 according to the most recent decennial census is limited to $250,000.
- A county or municipality with a population of 25,000 or more and less than 75,000 according to the most recent decennial census is limited to $500,000.
- A county or municipality with a population of 75,000 or more according to the most recent decennial census is limited to $1,000,000; or ten-percent of the jurisdictions' total operating budget from the previous fiscal year, whichever is less.

Grants under this program can be used for repairs to public infrastructure damaged in the declared event, overtime costs, contracts, and necessary supplies.

110 Michigan Continuity of Government Plan – Current Edition 2019
This document should not be published publicly.
The primary objective of this plan is to ensure the continuation of governance by the state, federal, and local governments. Maintaining the continuity of operations within the state's government ensures the security of the state's political future.

110 Michigan Continuity of Operations Plan – Current Edition 2019
This document should not be published publicly.

Essential support functions (ESFs) cannot stop operating in a disaster and must continue to provide the support and services critical to the functioning of the state and response and recovery operations. This plan ensures that those essential support and critical functions will continue even when threats, hazards, disasters, or acts of terror would normally disrupt operations.

111 Michigan Emergency Repatriation Plan – Current Edition 2018 * (2017)

This document should not be published publicly.

The Michigan Emergency Repatriation Plan provides an organizational and operational framework for the State of Michigan to administratively process, temporarily care for, and provide onward transportation assistance to repatriated citizens that reenter the United States through a Michigan Port of Entry (POE). (Repatriation is the procedure whereby U.S. citizens are officially processed back into the United States after evacuation from overseas. Repatriation is a federally-initiated action that is carried out through the states, with the assistance of local governmental agencies and nongovernmental relief organizations.)

APPENDIX II: LIFELINES WORKSHEETS

The worksheets below are drafts which show the Lifeline, their subcomponents (which can be individually assigned a red, yellow, green, gray status), the impact of that subcomponent, any limiting factor in the recovery of that subcomponent, and a place for notes. Related ESFs are also noted.

COMMUNICATIONS

Component	Sub-Component	ESF	Status	Impact	Limiting Factor	Notes
Infrastructure	Status of telecommunications service	3/2				
	Reliability of internet service	3/2				
	Reliability of cellular service	3				
	Requirements for radio/satellite communications capability	2/3				
Financial Services	Access to cash	5/3				
	Access to electronic payment	5/3				
	National economic impact	5				
Alerts, Warnings, Messages	Status of the emergency alert system (e.g. TV, radio, cable, cell)	5/3				
	Status of public safety radio communications	3				
	Options for dissemination of information to the whole community	3/ 15/ 2				
	External affairs and media communications	15				
911 and Dispatch	Status of phone infrastructure and emergency line	3				
	Number of callers and availability of staff and facilities	7/3				
	Status of responder communications	3				
	Availability of communications equipment	3/7				
Responder Communications	Status of EOC(s), dispatcher, and filed responder communications	2/3/7				
	Availability of status of first responder communications equipment	7/3				

ENERGY (POWER & FUEL)

Component	Sub-Component	ESF	Status	Impact	Limiting Factor	Notes
Power (Grid)	Status of electrical power generation and distribution facilities	12				
	Number of people and locations without power	5/12				
	Estimated time to restoration of power	12				
	Number of electrically dependent persons (e.g., medical equipment affected)	8/5/12				
	Status of nuclear power plants	12				
	Status of nuclear power plants within 10 miles	12				
	Status of natural gas and fuel pipelines in the affected area	12/10				
Temporary Power	Status of critical facilities	3/5				
	Availability of temporary power resources	12/7				
Fuel	Status of commercial fuel stations	12/14				
	Responder fuel availability	12/7				
	Status of critical fuel facilities	12				
	Status of fuel supply line	12/7/ 10				

HAZARDOUS MATERIALS

Component	Sub-Component	ESF	Status	Impact	Limiting Factor	Notes
Facilities	Status of hazardous material facilities	10				
	Amount, type, and containment procedures of hazardous materials	10				
	Reported or suspected hazardous materials/toxic release incidents	10/5				
	Status of hazardous materials supply chain	7/10				
Incident Debris, Pollutants, Contaminants	Debris issues affecting the transportation system	1/3				
	Status of debris clearance operations	3				
	Reported of suspected hazardous material/toxic release incidents	5/10				
	Actual or potential radiological or nuclear incidents	10/ REP				
	Monitoring actions planned or underway for Hazmat incidents	5/10				

FOOD, WATER, SHELTER

Component	Sub-Component	ESF	Status	Impact	Limiting Factor	Notes
Evacuation	Mandatory or voluntary evacuation orders	6/ 13				
	Number of people to evacuate	6				
	Evacuation routes	1				
	Evacuation time frame	6				
	Risk to responders and evacuees	13				
	Food, water, shelter availability	6				
Water Infrastructure	Operating status of public wastewater systems and private septic systems	3				
	Operating status of public and private water infrastructure	3				
	Operating status of wastewater processing facilities	3				
Food/Potable Water	Operating status of Points of Distribution	7				
	Operating Status of supermarkets, neighborhood markets, and grocery stores	11				
	Operating status of restaurants	11				
	Impacts to the food supply chain	11				
	Operating status of public and private water supply systems	3				
	Operating status of water control systems (e.g., dams, levees, storm drains)	3				
	Food/water health advisories	11/8				
Shelter	Requirements for emergency shelter	6				
	Number and location of open shelters	6				
	Current population in shelters	6				
	Transitional Sheltering Assistance Options	6				
	Potential future sheltering requirements.	6				
Durable Goods	Need for PODs	7				
	Pre-designed POD locations	7				
	Operating status of PODs	7				
	Resource distribution at PODs	7				
Agriculture	Status of area agriculture	11				
	Status of food stock	11				
	Food Safety	11				

HEALTH AND MEDICAL

Component	Sub-Component	ESF	Status	Impact	Limiting Factor	Notes
Medical Care	Status of acute medical care facilities (e.g., level 1 trauma center)	3/8				
	Status of chronic medical care facilities (e.g., long term care centers)	3/8				
	Status of primary care and behavioral health facilities	8				
	Status of home health agencies	6/8				
	Status of VA Health System resources in affected area	8				
Health Care Supplies	Status of pharmaceutical supply chain	7/8				
Patient Movement	Status of state and local EMS systems	8				
	Active patient evacuations	1/8				
	Future patient evacuations	1/8				
Public Health	Status of state and local health departments	8				
	Public health advisories	8/15				
Fatality Management	Availability of mortuary and post-mortuary services	8				
	Availability of transportation, storage, and disposal resources	7				
	Status of body recovery and processing	9/8				
	Descendant's family assistance	6				

TRANSPORTATION

Component	Sub-Component	ESF	Status	Impact	Limiting Factor	Notes
Highway/ Roadways	Status of major roads and highways	1				
	Status of critical and non-critical bridges	1/3				
	Status of maintenance and emergency repairs	1/3/7				
Railway	Status of area railways and stations	1				
Maritime	Status of area waterways	1				
	Status of area ports	1				
Pipeline	Status of natural gas and fuel pipeline	1/10				
Mass Transit	Status of public transit systems including underground rail, buses, and ferry services	1/14				
Aviation	Status of area airports	1/14				
	Status of incoming and outgoing flights	1				

SAFETY AND SECURITY

Component	Sub-Component	ESF	Status	Impact	Limiting Factor	Notes
Law Enforcement / Security	Evacuation routes	1/13				
	Force protection and security for staff	7/13				
	Security assessments at external facilities	3/13				
	Damaged law enforcement or correctional facilities	7/13				
	Curfew	13				
Government Services	Status of government offices and schools	5/ COOP				
	Status of continuity of government and continuity of operations	5/ COOP				
Search and Rescue	Number and location of missing survivors	6/9				
	Life threatening hazards to responders and survivors	5/9				
	Availability and resources of search and rescue teams	7/9				
	Status of animal assists, structural assessments, and shelter-in-place checks	6/3/9				
Responder Safety	Safety hazards affecting operations	5/13				
	Requirements for Personal Protective Equipment (PPE)	7/13				
	Security issues or concerns	13				
	Billeting for responders	7/13				
	Onsite training and policy	5, TE				
Fire Services	Location of fire	4				
	Percent of fire contained	4				
	Fire's rate and direction of spread	4/5				
	Weather conditions	5				
	Availability and resources of fire services	4/7				
Imminent Hazard Mitigation	Status of flood risk grants	5				
	Status of area dams, levees, reservoirs	3				

SOURCES

Americans with Disabilities Act of 1990, as amended with ADA Amendments Act of 2008. Jan. 2009. *Ada.gov*, https://www.ada.gov/pubs/adastatute08.htm. Accessed 7 Oct. 2019.

Dave Nyczepir. "'Federally Supported, Sate Managed, Locally Executed' Disaster Recovery". 13 Feb. 2018. *Route Fifty*. https://www.routefifty.com/management/2018/02/federal-state-local-disaster-recovery/145967/. Accessed 10 Nov. 2019.

Emergency Management Accreditation Program (EMAP). "Emergency Management Accreditation Program ANSI/EMAP EMS 5-2019." *EMAP-EM 5-2019*. 15 July 2020. *EMAP.gov,* https://emap.org/index.php/root/about-emap/96-emap-em-4-2016. Accessed 2 Feb. 2022.

Emergency Management Accreditation Program. "EMAP 2019 Emergency Management Standard." *EMAP.org*, https://www.emap.org/index.php/root/about-emap/96-emap-em-4-2016. Accessed 10 April 2022.

Michigan Legislature. "Public Act 390 of 1976; Emergency Management Act." http://www.legislature.mi.gov/(S(h2uaxx1va4gah2tr4o1s3qx0))/mileg.aspx?page=GetObject&objectname=mcl-act-390-of-1976#:~:text=AN%20ACT%20to%20provide%20for,and%20local%20agencies%20and%20officials%3B. Accessed 10 April 2022.

Michigan State Police, Emergency Management and Homeland Security Division. *Training and Exercise Guidebook 2021*. https://www.michigan.gov/documents/msp/TE_Guidebook_FINAL_558269_7.pdf. Accessed 30 Jan. 2022.

Michigan State Police, Emergency Management and Homeland Security Division. *Michigan Emergency Management Plan*. pub. 101, Aug. 2019. *Michigan.gov*, www.michigan.gov/documents/msp/MEMP_portfolio_for_web_383520_7.pdf. Accessed 12 Sept. 2019.

Michigan State Police, Emergency Management and Homeland Security Division, and United States Department of Homeland Security; Federal Emergency Management Agency Region V. *State of Michigan/UASI Training & Exercise Plan 2019-2021*. 2019.

Michigan State Police, Emergency Management and Homeland Security Division. *Michigan Hazard Analysis*. pub. 103. April 2019. *Michigan.gov* https://www.michigan.gov/documents/msp/MHA_2019__full_update_natural_hazards_653708_7.pdf. Accessed 17 Nov. 2019.

National League of Cities. "Narrow Government Authority: Dillion's Rule." *NLC.org*, Local Government Authority. https://web.archive.org/web/20160804131854/http://www.nlc.org/build-skills-and-networks/resources/cities-101/city-powers/local-government-authority. Accessed 10 April 2022.

United States Census Bureau. "Michigan's Population Topped 10 Million in 2020." *Census.gov,* 25 Aug. 2021. https://www.census.gov/library/stories/state-by-state/michigan-population-change-between-census-decade.html. Accessed 13 Dec. 2021.

United States Census Bureau. *QuickFacts Michigan. Census.gov.* https://www.census.gov/quickfacts/MI. Accessed 10 May 2020.

United States Department of Homeland Security. *State NIMS Integration; Integrating the National Incident Management System into State Operations Plans and Standard Operating Procedures*. *Ohio.gov,* ema.ohio.gov/Documents/pdfs/NIMS/Integrating_NIMS_into_STATE_EOP.pdf. Accessed 12 Sept. 2019.

United States Department of Homeland Security; Federal Emergency Management Agency. "National Risk and Capability Assessment." *FEMA.gov*, Threat and Hazard Identification of Risk Assessment (THIRA). https://www.fema.gov/emergency-managers/risk-management/risk-capability-assessment. Accessed 5 April 2022.

United States Department of Homeland Security; Federal Emergency Management Agency. "National Response Framework." *FEMA.gov*, Emergency Support Functions. https://www.fema.gov/emergency-managers/national-preparedness/frameworks/response#:~:text=Emergency%20Support%20Functions%20(ESFs)%20provide,Federal%20response%20to%20an%20incident. Accessed 30 Jan. 2022

United States Department of Homeland Security; Federal Emergency Management Agency. *Developing and Maintaining Emergency Operations Plans; Comprehensive Preparedness Guide (CPG) 101*. vol. 2.0, Nov. 2010. *FEMA.gov*, www.fema.gov/media-library/assets/documents/25975. Accessed 12 Sept. 2019.

United States Department of Homeland Security; Federal Emergency Management Agency. *NIMS Doctrine Supporting Guides & Tools*. 7 May 2019. *FEMA.gov*, https://www.fema.gov/nims-doctrine-supporting-guides-tools. Accessed 8 Oct. 2019.

United States Department of Homeland Security; Federal Emergency Management Agency. *National Response Framework*. 4th ed., Oct. 2019. *FEMA.gov*, https://www.fema.gov/media-library-data/1572366339630-0e9278a0ede9ee129025182b4d0f818e/National_Response_Framework_4th_20191028.pdf. Accessed 11 Nov. 2019.

United States Department of Homeland Security; Federal Emergency Management Agency. *Homeland Security Exercise and Evaluation Program (HSEEP).* April 2013. *FEMA.gov*, https://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep_apr13_.pdf. Accessed 10 Nov. 2019.

United States Department of Homeland Security; Federal Emergency Management Agency. *National Preparedness Goal.* 2nd ed., Sept. 2015. *FEMA.gov,* https://www.fema.gov/media-library-data/1443799615171-2aae90be55041740f97e8532fc680d40/National_Preparedness_Goal_2nd_Edition.pdf. Accessed 10 November 2019.

United States Department of Homeland Security; Federal Emergency Management Agency. *Community Lifelines Implementation Toolkit: Comprehensive information and resources for implementing lifelines during incident response*. vol. 2.0, Nov. 2019. *FEMA.gov,* https://www.fema.gov/media-library-data/1573854342974-a94cb00eb44b245d61d88fdf66e74bd6/Final_Tlkt2.0_RspnsTlkt20191114(508)v1845.pdf. Accessed 17 Nov. 2019.

United States Department of Homeland Security; Federal Emergency Management Agency. *FEMA Preliminary Damage Assessment Guide*. May 2020. *FEMA.gov*, https://www.fema.gov/sites/default/files/2020-07/fema_preliminary-disaster-assessment_guide.pdf. Accessed 5 April 2022.