Emergency Support Function 10

HAZARDOUS MATERIALS AND ENVIRONMENTAL PROTECTION

Responsible Agencies

State Agencies

Primary State Agency

Massachusetts Department of Environmental Protection

Supporting State Agencies

Department of Fire Services

Department of Public Health

Department of Conservation and Recreation

Department of Agriculture Resources

Massachusetts Environmental Police

Massachusetts Office of Coastal Zone Management

Massachusetts National Guard

Supporting Federal Agencies

United States Coast Guard

United States Environmental Protection Agency

United States Army Corps of Engineers

1.0. INTRODUCTION

1.1. Purpose

The purpose of Massachusetts Emergency Support Function 10 (ESF-10) *Hazardous Materials and Environmental Protection* is to provide a framework for coordinating state-level assistance within the Commonwealth of Massachusetts for emergencies or disasters which pose a potential or observed threat to the environment or public safety, public health, or property, or which involve hazardous materials incidents in situations where the SEOC is active.

This annex achieves this goal by detailing responsible state agencies' roles and responsibilities in the coordination of resources and provision of expertise to state and local government decision-makers on environmentally sound practices and procedures to respond to and mitigate threats to the environment.

1.2. Scope

This annex is applicable to all agencies and departments of the Commonwealth, and other affiliated agencies and response partners working to address threats to the environment or public health posed by hazardous materials releases or oil spills. This annex applies to preparedness, response, recovery, and mitigation activities conducted by this ESF in the event of an emergency or disaster.

This annex does not supersede 310 CMR 40.0000, also known as the Massachusetts Contingency Plan (MCP), nor does it supersede any state, Federal, or local laws. This annex does not provide any specific guidance on responding to hazards, but rather supports coordination of best practices as determined by the needs of the situation. This annex does not apply to radiological hazards, which are addressed in the Preventative Radiological/Nuclear Detection (PRND) Concept of Operations. Similarly, Ethanol response information is contained in the Large Volume/ High Concentration Ethanol Response Plan.

1.3. Policies

- This annex is not intended to replace or supplant existing Federal, State of Local laws or regulations.
- Local environmental protection and hazardous materials response assets will remain in control of their respective jurisdictions.
- ESF-10 will coordinate assistance to cities and towns through technical/subject matter expertise and resource support, to include personnel, contractor support, equipment, facilities, materials, and supplies relating to environmental protection and hazardous materials response.
- ESF-10 will coordinate with the federal Regional Response Team (RRT), as needed, specific to the incident. The RRT serves as a planning and preparedness body before a response, coordinating respective federal agency response resources and providing coordination and advice to the Federal On Scene coordinator (FOSC) during response actions.

- DEP will serve as the State On-Scene Coordinator (SOSC) in a unified response as dictated by existing Area Contingency Plans (ACPs) and overall Massachusetts Contingency Plan (MCP).
- Department of Fire Services (DFS) commanding the Hazardous Materials Response
 Teams (HMRT) will carry out their responsibilities under Massachusetts General Law
 Chapter 21K to coordinate, integrate and manage their effort to direct, identify, contain,
 or mitigate releases or the threat of release of oil/hazardous materials.
- DFS/HMRT and DEP Emergency Response resource requests will be coordinated under the direction of ESF-10 which will provide a bridge between the on-scene response coordinator and overall disaster response activities.

2.0 SITUATION AND ASSUMPTIONS

2.1. Situation

A major disaster or catastrophic event may result in substantial damage to coastal areas, Areas of Critical Environmental Concern (ACEC) or other natural resources. While hazardous materials are constantly being properly manufactured, transported, used, stored, and disposed of across the Commonwealth, unintentional or intentional releases of hazardous materials will occur. These releases will have a variety of potential impacts to public health & safety, property, and the environment if not properly addressed. Depending on the type and scope of the incident, supplemental state resources and subject matter expertise may be required to assist in a response to a hazardous material release. Such a response may be required as a stand-alone event, or as a cascading event following an emergency or disaster.

2.2. Planning Assumptions

- The National Contingency Plan (NCP) serves as the basis for planning and use of federal resources for response to releases or threats of releases of oil/hazardous substances. Response actions under ESF-10 will follow policies, procedures, directives, and guidance developed to carry out the provisions contained in the NCP.
- The MCP and Massachusetts General Law Chapter 21E will contain information on providing for the protection of health, safety, public welfare and the environment by establishing requirements and procedures for the response to releases or threats of releases of oil/hazardous materials.
- Cities and towns have emergency management resources, plans, and procedures to support routine oil/hazardous material releases and related environmental protection response efforts.
- Incidents involving oil/hazardous materials may be below state/federal reporting quantities.
- When an oil/hazardous material incident occurs, local responders and private sector entities will use their own resources first, then use local mutual aid agreements and execute contracts with the private sector. In a catastrophic incident, local response

capabilities will be overwhelmed by the extent of the effort required to respond to, assess, mitigate, stage, monitor, clean up, and dispose of oil or hazardous materials released into the environment. Local governments will only request State or Federal resources when the impacts of the incident exceed or are expected to exceed their own capabilities.

- The Commonwealth has resources and expertise to supplement local response efforts.
 In addition, federal assistance may be requested to support state and local efforts if the incident exceeds state and local capabilities.
- Maintaining state-level communications capabilities for coordination and situational awareness across ESF-10 agencies with responsibilities detailed in this annex will be critical to maintain situational awareness.
- Other agencies, departments, and organizations may be called upon to assist in emergency operations in support of disaster response, consistent with their roles and responsibilities as they relate to environmental protection and hazardous materials.
- Federal, State, and local governments, private sector and Non-Governmental Organizations (NGO's) assigned responsibilities under ESF-10 have developed internal plans and operating procedures specifying their emergency support actions for implementation in the event of a disaster or emergency.
- Numerous incidents may occur simultaneously in different locations both inland and along coastal waters, requiring additional response and cleanup personnel and equipment to supplement existing capabilities and to provide relief resources.
- In the event of a catastrophic incident, standard communications equipment and practices will not be disrupted or destroyed.
- Response personnel, cleanup crews, and response equipment may have difficulty reaching the site of an oil or hazardous materials release because of damage sustained to transportation infrastructure.
- Laboratories responsible for analyzing hazardous materials samples may be damaged or destroyed. DEP Field Assessment and Support Team (FAST) vehicle and Environmental Protection Agency (EPA's) mobile lab may be activated to supplement or enhance real time analysis. The Civil Support Team (CST) is an additional resource that may be activated.
- Emergency exemptions may be needed for oil and hazardous materials containment, cleanup, and disposal of contaminated material. ESF-10 will assist in the exemption process and situational awareness, (i.e., Emergency Wetlands Regulations, 2-hour notification with power utilities) storage and emergency treatment discharge.
- Non-impacted facilities near an affected area may require monitoring by ESF-10 and/or its constituent agencies.

3.0. CONCEPT OF OPERATIONS

3.1. General

This annex will be activated at the direction of MEMA when there is a potential for or actual disaster situation involving environmental protection and oil/hazardous materials. Depending on the incident type and resource needs, MEMA will notify the primary agency at the time of State Emergency Operations Center (SEOC) activation to provide overall coordination of ESF-10. All other agencies with responsibilities under ESF-10 will serve as supporting agencies.

The primary agency will provide direction and work in conjunction with support agencies to cohesively coordinate all ESF-10 environmental protection response activities (wetlands, air, coastal, etc.) as well as response actions relating to oil/hazardous materials threats or actual releases resulting from an emergency or disaster.

ESF-10 reports to the SEOC Operations Section. Depending on the size, scope, and complexity of the incident, the SEOC organizational chart may be expanded, to ensure proper Span of Control is maintained. To accommodate this, the ESFs may be aligned in appropriate Branches, with similar ESF's grouped together. In this scenario, ESF-10 will be organized under the Operations Support Branch, together with ESF's 5 *Business and Industry* and 16 *Military Support*.

3.2. Organization

- All personnel and activities associated with ESF-10 will operate under the Incident Command System (ICS).
- DEP has been designated the primary agency for ESF-10.
- Each agency shall designate a minimum of two persons who can serve as a representative for their agency at the SEOC to support ongoing ESF-10 activities on a 24-hour basis. Designated agency representatives should have subject matter expertise and have access to the appropriate authority for committing agency resources.

3.3. Notification

It is likely that local government or ESF partners who are not MEMA will be the first to be notified of an oil or hazardous material spill or release. Although separate reporting requirements under the MCP require responsible parties to report to DEP and the National Response Center (NRC), local emergency responders may escalate notifications to MEMA in the event additional resources may be needed.

MEMA will notify the ESF-10 points of contact for each activated organization or agency to report to the SEOC for coordination and implementation of activities relating to oil or hazardous materials spills or releases resulting from an emergency or environmental protection disaster (i.e., major winter storms). Each ESF-10 organization or agency is responsible for securing sufficient staff on a continuous and on-going basis to support and carry out the activities tasked to their agency in accordance with Massachusetts Executive Order 144.

Activities

Responsible agencies for ESF-10 should conduct the following actions:

a. Preparedness Actions

- Convene regular meetings of ESF-10 stakeholders and/or ESF Team to review and update the ESF-10 annex and standard operating procedures.
- Develop and maintain internal agency operational plans and procedures to support ESF-10 activities.
- Maintain and update necessary and appropriate contacts with each hazardous materials response team, local fire chief, MA Coastal Storm Damage Assessment Team, and ESF-10 supporting agencies and organizations.
- Develop resource lists of available equipment, materials, supplies, personnel, and transportation available to support this annex.
- Pre-designate staff to support SEOC operations.
- Ensure that ESF-10 stakeholders notify MEMA of staff changes.
- Participate in training and exercises related to the ESF-10 annex.
- Maintain and distribute to appropriate agencies Tier II information of current inventories, including locations of existing threats and facilities, equipment and materials, supplies, special capabilities, and personnel throughout the Commonwealth.
- Plan for responses to oil/hazardous materials incidents.
- Develop detailed procedures for identification, control and cleanup of oil or hazardous materials in accordance with the Massachusetts Contingency Plan.
- Identify training and maintain a level of readiness through training for response personnel as specified in the SOPs.
- Develop mutual aid agreements with local agencies, other state agencies, contiguous state agencies, federal agencies and private agencies/organizations.
- Collect and utilize licensing, monitoring and/or transportation information from the local, state or federal agencies and/or private organizations to facilitate emergency response.
- Participate in and/or conduct exercises and tests.
- Participate in the hazards identification process and identify and correct vulnerabilities.
- Develop emergency preparedness programs for oil/hazardous materials incidents.
- Provide technical assistance to local communities in the development and implementation of All Hazard Mitigation Plans.
- Provide technical assistance to communities in the development of climate change impact assessments, identification, and implementation of adaption/resiliency strategies.

- Review Area Contingency Plans.
- Review tank vessel spill response plans.

c. Response Actions

Pre-Impact

Upon receiving notification to report to the SEOC in preparation of an incident, ESF-10 agencies and organizations will complete the following actions commensurate with emergency priorities within the state and based on availability of resources:

- Provide appropriate representation to the SEOC to support ESF-10 activities.
- Maintain communications with the SEOC and MEMA Regional Emergency Operation Centers (REOCs), monitor WebEOC, obtain status reports, and keep the SEOC informed of progress of assigned tasks.
- Review existing plans and procedures.
- Notify the appropriate points of contacts at each respective ESF-10 agency and organization to pre-position resources and response personnel as needed.
- Ensure respective ESF-10 agency decision makers are kept informed of the situation.
- Develop strategies for initial response to include the mobilization of resources and personnel.
- Verify inventories of available oil/hazardous materials services, including the status of personnel, contractors, equipment, supplies, and transportation of each to support the state's six Hazardous Materials Response Teams and the four Department of Environmental Protection Regional Emergency Response Units. Provide summary listing to the SEOC Planning and Operations Sections.
- Implement predetermined cost accounting measures for tracking overall ESF-10 personnel, equipment, materials, and other costs that incurred during emergency response actions.
- Provide situational awareness information for reports and/or statements to the SEOC Planning Section as needed.
- Conduct initial assessment of hazardous materials response needs and assemble and analyze data for forecasting the likelihood of hazardous materials spills and releases, and where these likely sites are located.
- Conduct pre-planning for emergency permits and/or waivers.
- Utilize information from the SEOC Planning Section for response planning purposes.
- Monitor environmental parameters such as tides, coastal winds, wave heights, precipitation, river heights and volumes, as well as National Weather Service forecasts and briefings to estimate the timing and magnitude of impact on property and infrastructure.

Initial Response

- If an agency has not already done so, provide appropriate representatives to the SEOC to support ESF-10.
- Designate appropriate staff and points of contact to support the response.
- As necessary, coordinate personnel and resources for field assessments and response/recovery teams.
- Coordinate with ESF-8 *Public Health* to ensure safe handling of any potential contamination of injured persons.
- Gather and provide situational awareness information for reports and/or statements to the SEOC Planning Section as needed. In addition, use information provided by the SEOC Planning section to support effective response actions.
- Establish communications with the appropriate agency field personnel to support response efforts and maintain situational awareness.
- Develop ESF-10 related information for the SEOC roster and Situational Awareness Statements (SAS) and provide to the Planning Section.
- Implement cost accounting measures for tracking deployed personnel, equipment, materials, and other costs incurred by supporting ESF-10 response actions during the incident.
- Coordinate resources to support oil/hazardous materials and environmental protection response.
- Coordinate with ESF-1 *Transportation* as needed on transportation needs for ESF-10 response personnel.
- In cases where State resources and private sector contracts are exhausted, coordinate with ESF-16 for additional resources.
- Coordinate with the SEOC Operations Section Chief as needed to develop and secure staging areas for oil/hazardous materials response.
- Coordinate distribution of any necessary supplies to the staging area in support of ESF-10 activities.
- Coordinate with the representative from ESF-4 Fire Fighting acting as a liaison between
 the Fire Mobilization Districts and Hazardous Materials Response Teams who will report
 to the SEOC as directed by MEMA to support hazardous materials response actions.
- Coordinate with ESF-15 *Public Information and External Affairs* to provide information to the public, industry, and local government on hazardous materials and environmental protection matters.
- Coordinate with Federal agencies and counterparts as needed, based on incident, when response activities/requirements exceed the capability of the Commonwealth.

 Coordinate formal activation of the Coastal Storm Damage Assessment Team with CZM for support in conducting initial coastal damage assessments after the high tides in coastal storms where moderate to major damage is predicted.

Continuing Response

- Coordinate with other ESFs represented at the SEOC to provide support in response to hazardous materials threats and protect the environment.
- Coordinate with other ESFs that may have authorities, resources, capabilities, or expertise necessary to support ESF-10 missions.
- Monitor the procedures followed by local responding agencies and Hazardous Materials Response Team(s) during incident response.
- Continue to gather and provide situational awareness.
- Coordinate the Coastal Storm Damage Assessment Team in conducting initial coastal damage assessments after the high tides in coastal storms where moderate to major damage is predicted.
- Enter damage reports from Storm Team members into the online reporting system, StormReporter and WebEOC.
- Provide information for Situational Awareness Statements and the SEOC roster for the next operational period.
- Coordinate resources to support ongoing ESF-10 response activities.
- Ensure ESF-10 is adequately staffed on a continuous basis as determined by the SEOC Planning Section Chief.
- Ensure staff briefings are conducted during shift changes and at designated times throughout the event.
- Support decontamination of marine assets

d. Recovery Actions

- Continue to coordinate coastal damage assessments and assemble and analyze data for SEOC and MEMA Recovery Section Chief and/or Declaration Unit.
- Coordinate with support agencies to ensure financial tracking of all deployed assets and adequate cost accounting measures are being used. Generate summary reports and share with the SEOC.
- Coordinate resources to support consolidation of operations as the threat diminishes or as ESF-10 resource needs diminish.
- Provide hazardous material guidance and support as needed during the recovery phase.
- Coordinate with support agencies to ensure financial tracking of all deployed assets and adequate cost accounting measures are being used. Generate summary reports and share with the SEOC.

- Draft recommendations for after-action reports and other reports as needed.
- Implement existing plans, including accessing emergency permits and/or waivers, as necessary.
- Ensure that hazardous materials spills or releases are secured, contained, removed, and disposed of appropriately.
- Organize and coordinate the use of disposal facilities.
- Coordinate with responders to address the discovery oil/hazardous material containers transported away from their point of origin (i.e. "orphan").

e. Mitigation Actions

- Conduct assessments of ESF-10 capabilities to identify potential shortfalls.
- Develop plans to mitigate identified shortfalls of resources.
- Assist communities with restoring roads and utilities for accessibility.
- As part of the rebuilding/cleanup process, assist communities in identifying mitigation actions that could be taken to reduce future vulnerabilities, and identifying potential financial and technical resources available to support these efforts.
- Coordinate with ESF-3 to assist communities with restoring water treatment and wastewater treatment plants that have been damaged.
- Coordinate with ESF-12 to assist communities with restoring electrical station and substations that have been damaged.
- The Executive Office of Energy and Environmental Affairs (EOEEA), through CZM, will
 administer the Coastal Resilience Grant Program to provide financial and technical
 support to coastal communities to identify and map vulnerabilities, conduct adaptions
 planning, redesign vulnerable public facilities, and infrastructure and implement nonstructural storm damage protection projects.

4.0. RESPONSIBILITIES

4.1. ESF-10 Primary Agency Responsibilities

a. Massachusetts Department of Environmental Protection (DEP)

- Responsible for protecting public health, safety, welfare and the environment by
 ensuring clean air and water, the safe management and disposal of solid and
 hazardous wastes, the timely cleanup of oil/hazardous waste site and spills, and the
 preservation of critical environmental resources.
- Regularly meet and coordinate with ESF-10 supporting agencies, to:
 - Maintain a list of critical contacts, noting any changes to MEMA
 - Maintain a list of ESF-specific assets which could be deployed during an emergency

- Report any unmet needs to MEMA
- Report to the SEOC as directed to staff the ESF-10 workstation.
- Direct, coordinate, and integrate the overall state oil/hazardous materials response in the affected area(s).
- Maintain Situational Awareness, monitor weather conditions, and ensure a state of readiness for the ESF.
- As needed, pre-stage resources to support ESF-10 requirements.
- Identify which support agencies may be needed to support mission requests and take
 the necessary steps to ensure that support agencies are activated or placed on
 standby, as needed.
- In coordination with MEMA, ensure that agencies assigned to ESF-10 are responding to assigned requests for assistance.
- Coordinate ESF-10 preparedness, response and recovery activities with other ESFs at the SEOC and MEMA REOCs.
- Identify and coordinate ESF-10 staffing requirements at the SEOC and MEMA REOCs.
 Sufficient staffing will be available for 24-hour per day operations.
- Coordinate with support agencies and MEMA to direct environmental protection and oil/hazardous materials response resources based on the priority of protection of life and property.
- Coordinate with the local district fire chief's liaisons to effectively respond to existing or potential hazardous materials incidents.
- Tabulate and maintain a list of all state hazardous materials response resources and their locations.
- Coordinate with other ESFs to obtain information related to vendors, volunteer groups, and other organizations that may be able to supplement local and state environmental protection and hazardous materials resources.
- Identify facilities for possible use as ESF-10 staging areas.
- Coordinate as necessary with ESF-4 Fire Fighting and ESF-13 Public Safety and Security for firefighting and law enforcement resources in threatened or impacted areas.
- Provide regular updates on ongoing ESF-10 activities to the SEOC Command staff.

4.2. ESF-10 Supporting Agency Responsibilities

a. Department of Fire Services (DFS)

- Provide technical advice and liaison services between ESF-10 and responding hazardous materials units.
- Coordinate with recognized Hazmat Teams for availability of local assets for state response, as necessary.

b. Department of Public Health (DPH)

- Respond to bio-hazardous, radiological, and mixed hazardous materials incidents
- Provide information about the potential health impacts of the incident.

c. Department of Conservation and Recreation (DCR)

 Responsible for the care and oversight of natural, cultural and historic resources in the Commonwealth.

d. Coastal Zone Management (CZM)

- Responsible for monitoring the hazardous weather outlook
- Activate the Coastal Storm Damage Assessment Team during coastal storm events predicted to have moderate to major impacts.
- Receive and enter reports regarding damage into StormReporter and WebEOC.
- Coordinate technical assistance to communities with affected wetlands and coastal resources

e. Department of Agricultural Resources (DAR)

 Responsible for the protection of livestock and agricultural resources in the Commonwealth.

f. Massachusetts National Guard (MANG) Civil Support Team (CST)

 May provide military support to civilian authorities in times of major disasters or emergencies to include rapid assessment capabilities for assessing potential environmental impacts magnitude and intensity.

g. United States Coast Guard (USCG)

 Provides access to federal resources for emergencies involving hazmat and oil spills on waterways within the Captain of the Port (COTP) zone.

h. United States Environmental Protection Agency (EPA)

Provides access to federal resources outside of USCG COTP area.

4.3. Other Agencies

Other agencies not explicitly named in this annex may have authorities, resources, capabilities, or expertise required to support ESF-10 activities. These agencies may be requested to support ESF-10 activities as needed.

5.0. ADMINISTRATION AND LOGISTICS

5.1. Staffing

As required by Massachusetts Executive Order 144, all ESF-10 responsible agencies must designate at least two personnel to act as SEOC liaisons. These liaisons should be knowledgeable about the resources and capabilities of their respective agencies and have access to the appropriate authorities for committing said resources and capabilities.

5.2. Demobilization

ESF agencies can work with the SEOC Planning Section and Operations Section to provide context to demobilization planning, including trends, workloads, upcoming operations, etc., and receive updates on priorities, objectives, and tasks as operations slow or cease.

- ESF agencies should have pre-established internal demobilization procedures in place to help facilitate the orderly, safe, and efficient return of personnel and resources to their original locations and operating status when their missions supporting SEOC priorities and objectives have concluded. These procedures should take SEOC Demobilization plans into effect to ensure they complement each other.
- Demobilization of rostered and mobilized ESF personnel and resources will be initiated based on operational needs and at the direction of the MEMA director /SEOC Operations Section Chief. It should be noted that ESF agencies may be subject to a rapid recall to partial or full activation based on evolving operational needs.
- ESF agencies must ensure that they have closed out any open and actively ongoing
 operations in support of the SEOC, reported status updates and demobilization to
 the SEOC Planning Section Chief, and have coordinated as needed with other ESFs
 regarding their demobilization status.

5.3. Mutual Aid

The process for requesting mutual aid from entities either within or outside of Massachusetts is described in the "Mutual Aid" section of the State CEMP Base Plan.

5.4. Annex Review and Maintenance

This annex will be reviewed and revised in accordance with the Emergency Management Program Administrative Policy by participating agencies and organizations. MEMA's Planning Unit will provide administrative support for the plan review process, including coordinating and facilitating stakeholder meetings, compiling, and distributing meeting notes and updating the plan.

6.0. AUTHORITIES, RESOURCES, AND REFERENCES

6.1. Authorities

See Authorities section of State CEMP Volume 2: Response and Short-Term Recovery.

6.2. Resources

See Resources section of State CEMP Volume 2: Response and Short-Term Recovery.

6.3. References

- Massachusetts Comprehensive Emergency Management Plan (CEMP) Large-Volume/High Concentration Ethanol Annex
- Massachusetts General Law (MGL) Chapter 21E is known as the "Massachusetts Oil and Hazardous Material Release Prevention and Response Act" and legislates, among other things, who and what is required in the event of a release of OHM and empowers the Department of Environmental Protection to create regulations to address said releases. The regulations published at 310 CMR 40.0001 through 40.9999, cited collectively as 310 CMR 40.0000 and referred to as the Massachusetts Contingency Plan (the "MCP"), are promulgated by the Commissioner of the Department of Environmental Protection under MGL Chapter 21E (and other sections of the MGL).
- The Massachusetts Contingency Plan (MCP) 310 CMR 40.000 implements Chapter 21E and is intended to comport with and complement the National Contingency Plan promulgated by the United States Environmental Protection Agency under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. It directs that all releases of oil/hazardous material must be cleaned up in a timely manner; that some releases/threats of release over certain quantities are reportable to DEP; all reportable releases/threats of release require response actions; and all response actions by any party require approval of DEP.
- Massachusetts General Law Chapter 21K, Mitigation of Hazardous Materials
- Massachusetts Executive Order 144
- Massachusetts Terrorism Response Annex
- Radiological Emergency Response Plan
- CEMP Volume 3: Long Term Recovery
- Debris Management Plan
- ESF-10 Standard Operating Procedures
- Highly Pathogenic Avian Influenza Multi-Agency Coordination and Operations Plan
- Annex for Emerging Infections and/or Contagious Diseases in Non-Human Populations
- Wetlands Protection Act
- DEP Emergency Regulations

- DEP Emergency Powers Annex
- SEOC ESF SOP Guidance Document
- Threat Hazard Identification and Risk Assessment (THIRA)
- Hazard Identification and Risk Assessment (HIRA)
- CEMP Volume 1: ResilientMass Plan