

## PART 4

### NATURAL AND TECHNOLOGICAL HAZARDS

#### 4.1 Introduction

Part 4 of this Plan deals with the management of specific hazards/emergencies/disasters that could affect New Bedford.

Some emergencies or disasters are generated by nature (natural hazards) and some are human-caused (technological hazards). In some cases a combination of a natural phenomenon and human activities will bring about a disaster.

Presently included in this section are:

#### Natural Hazards

Drought	Section 4.2
Earthquake	Section 4.3
Flooding	Section 4.4
Hurricane	Section 4.5
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Urban Fire/Wildfire	Section 4.7
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*Reserved for future use*                      *Section 4.9 – 4.10*

#### Technological Hazards

Civil Disturbance	Section 4.11
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## **4.2 DROUGHT**

Drought is a natural hazard that evolves over months or even years, affects a specific area or an entire region. Generally, a drought can be defined as a continuous period of time in which rainfall is significantly below the norm for a particular area.

### **4.2.1 HAZARD AGENTS AND LOCAL VULNERABILITY**

Massachusetts is often considered a “water-rich” state. Under normal conditions, regions across the state annually receive between 40 and 50 inches of precipitation, with New Bedford receiving an average of 47.3 inches. However, the state can experience extended periods of dry weather, from single season events to multi-year events such as experienced in the mid 1960s. Historically, most droughts in Massachusetts have started with dry winters, rather than a dry summer.

Severe droughts in Massachusetts, which coincided with periods of extreme heat, occurred in 1961-67, 1980-81 and 1987-89. The 1987-89 drought cost \$39 billion in estimated damages to agricultural crops, wildlife, livestock, land values, water quality and the economy in the Central and Eastern States.

The impacts of drought hit hardest when people place too high a demand on the water supply. Unrealistic expectations often contribute to overestimating the water supply. Drought can be mitigated by carefully balancing demand with supply.

### **4.2.2 RESPONSIBILITIES FOR DROUGHT PLANNING AND RESPONSE**

#### **A. Mitigation**

4. Seek to balance demand on water supply through land use, zoning and other tools.
5. Encourages water conservation and water control measures to ease demand on water supply.
6. Improve efficiency and capacity of the water supply system, including leak detection and repair.

#### **B. Preparedness**

1. Identify potential emergency water sources, such as purchase from adjoining communities if available.
1. Keep abreast of drought forecasts issued by the State Drought Task Force.
2. Encourage businesses and other bulk users to develop water conservation and shortage plans.

**C. Response**

1. Implement water use controls as needed.
2. Coordinate requests for potable water in emergency situations.

**D. Recovery**

1. Seek assistance for drought related financial losses.

### **4.3 EARTHQUAKE**

An earthquake is a sudden, violent shaking or movement of part of the earth's surface caused by the abrupt displacement of rock masses, usually within the upper 10 to 20 miles of the earth's surface.

Earthquakes range in intensity from slight tremors to devastating shocks and may last from just a few seconds to several minutes; can occur in a series over several days and may be followed minutes, hours, or days later by aftershocks.

#### **4.3.1 HAZARD AGENTS**

The earthquake hazard may consist of ground motion (vibration and shaking of the ground), ground surface fault ruptures, liquefaction (ground taking on temporarily characteristics of a thick liquid) and landslides.

Earthquakes are commonly measured on the Richter Scale which ranges from 1.0 intensity on upward. Earthquakes measuring less than 3.0 are felt by seismographs and other sensitive instruments. Above 3.0 they become more apparent, causing dishes to rattle, and poorly secured objects may go flying. In the range of 5.0 and upward earthquakes become damaging or destructive to devastating in the high ranges and cause structural collapse, and injury, and death.

Earthquakes precipitate several potentially devastating secondary effects. They are:

- The collapse of buildings, bridges, roads, and other vital structures
- Rupture of utility pipelines
- Major transportation accidents, (railroad, chain highway crashes, aircraft, and marine)
- Extended power outage
- Fires and/or explosions
- Hazardous materials accidents
- Water contamination

#### **4.3.2 LOCAL VULNERABILITY**

Although New England has not experienced a damaging earthquake since 1755 (Cape Ann near Gloucester, 11/18/1755, estimated 6.3 on the Richter Scale), numerous, less powerful earthquakes have been centered in Massachusetts and neighboring states.

There are five seismological faults in Massachusetts, but there is no discernable pattern of previous earthquakes along these fault lines.

Although the likelihood of an earthquake occurrence in Massachusetts is less than in many other areas of the country, seismologists state that a serious earthquake occurrence is possible anywhere in the state including New Bedford.

Most buildings and infrastructure in New Bedford were designed and built without regard for the effects of a damaging earthquake. While Seismic provisions to the state building code were adopted in 1975, the majority of public buildings still in use in New Bedford were constructed prior to that date.

School facilities identified as mass care shelters were constructed in accordance with said Seismic provisions. However, facilities housing both the Primary and Alternate Emergency Operations Centers predate these provisions and could be rendered unusable.

Fill, sandy or clay soils are more vulnerable to earthquake pressures than other soils. In several areas of the city construction has occurred on filled land, although this accounts for a small percentage of overall land area. While the entire city could be impacted by an earthquake, these areas could be more severely impacted.

### **4.3.3 CONCEPT OF OPERATION**

Unlike other natural disasters which approach gradually and escalate over hours and days, earthquakes strike suddenly and without warning. Damage and destruction occurs in a matter of a few seconds or minutes. Although sometimes rumblings that are indicative of instability in a certain area of the earth are picked up by seismological instruments, it is unlikely that they will provide a "prediction" of the time and place of a particular earthquake. An earthquake occurs and it is over before officials have an opportunity to warn the public to make preparations and take cover. An earthquake does not provide emergency agencies with the opportunity to take advantage of the lead time of the "watch" or "warning" status or the "standby" phase of operations.

When an earthquake occurs, the Emergency Operations Center (EOC) will be activated as soon as possible while response operations are initiated and ongoing. Buildings housing both the Primary and Alternate EOC were constructed prior to Seismic building code provisions and could be rendered unusable. If this occurs, the EOC will be established in another public building (e.g. school, library) that has been surveyed for damage and deemed safe to occupy.

When notified of an earthquake occurrence, the Director of the Massachusetts Emergency Management Agency (MEMA) will likely recommend to the Governor that a state-wide State of Emergency be declared. This may or may not be preceded by a local declaration of emergency. At this time, MEMA will activate the state EOC and commence actions to support local emergency operations, and begin to coordinate the services and resources necessary to save lives and property and restore the affected areas to a functioning condition.

#### 4.3.4 RESPONSIBILITIES FOR EARTHQUAKE PLANNING & INCIDENT MANAGEMENT

##### A. Mitigation

1. Local government should obtain local geological information and identify and assess structures and land areas that are especially vulnerable to earthquake impact and define methods to minimize the risk.
2. Adherence should be paid to land use and earthquake resistant building codes for all new construction.
3. Periodic evaluation, repair, and/or improvement should be made to older public structures.
4. Emergency earthquake public information and instructions should be developed and disseminated.
5. Earthquake drills should be held in schools, businesses, special care facilities, and other public gathering places.

##### B. Preparedness

1. Maintain current earthquake response plans for immediate use.
2. Maintain in a state of readiness all equipment, supplies and facilities that would be needed for management of an earthquake occurrence.
3. Conduct periodic training for emergency personnel in earthquake response.
4. Designate substitute public facilities that could be used as an EOC if the Primary and Alternate facilities sustain earthquake damage and are unsafe to use.
5. Designate facilities for use as Mass Care Shelters for earthquake victims that would most likely to withstand earthquake impact.
6. It is assumed that all special needs facilities could be affected to some extent by earthquake effects, therefore preparedness measures should be in place to address the needs of all facilities listed in the *Recourse Manual (Vulnerable Populations and Areas)*.
7. Most likely the entire population of the city will be affected by a seismic event. Estimate the maximum peak population affected, considering peak tourism, special event populations, and work hours.

##### C. Response

The EOC will be activated and appropriate response actions will be initiated to address any and all earthquake effects. These actions include:

1. EOC will be activated and response will immediately be engaged to address any and all earthquake effects.
2. Emergency warning/notification information and instructions will be broadcast to the public. See Master Warning List in the Resource Manual (Core Functions) section of this plan for warning methods that could be utilized for earthquake emergencies.
3. Dispatch of appropriate teams to conduct search and rescue operations.
4. Dispatch of emergency medical teams to triage, treat and transport of injured.
5. Dispatch of firefighting personnel to address fire/explosions, and hazardous materials incidents.
6. Police will coordinate needed evacuations and control of traffic.
7. Opening and staffing of reception centers (if needed) and mass care shelters.
8. Initiating animal control measures.
9. Police will protect critical facilities and conduct surveillance against criminal activities.
10. Immediate life-threatening hazards will be addressed such as broken gas and water lines, and downed utility wires.
11. Emergency food, water and fuel will be acquired.
12. Activate mutual aid assistance.
13. Measures will be taken relating to identification and disposition of remains of deceased by the Chief Medical Examiner.
14. Address public health hazards posed by sewage and water line breaks, flooding, loss of electrical power, etc.

**D. Recovery**

Restoration of community to pre-disaster status will address immediate and long-term measures including:

1. Restoration of utility services.
2. Decontamination of water resources.
3. Debris clearance.

4. Damage assessment of public and private property.
5. Demolition of irreparable structures.
6. Assisting victims with the provision of short and long-term food, water, clothing, housing, medical care, etc.
7. Coordination of re-entry of evacuees.
8. Public health monitoring of lingering long-term hazards.
9. Addressing of legal and insurance matters.
10. Application for state and federal disaster relief funds.
11. Overall long-term rehabilitation and reconstruction of affected area.

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## 4.4 FLOODING

Flooding is the temporary condition of inundation of normally dry land areas from the overflow of inland or tidal waters or the unusual or rapid accumulation or runoff of surface waters.

### 4.4.1 HAZARD AGENTS AND LOCAL VULNERABILITY

This section addresses two types of flooding to which New Bedford is vulnerable:

- A. Coastal Flooding resulting in the inundation of land areas along the coast caused by sea water above normal tidal actions. This is often caused by prolonged strong onshore flow of wind and/or high astronomical tides. However, because of New Bedford's topography, hurricane-force winds are usually necessary for coastal flooding to occur which could impact streets and property.
- B. Urban (Street) Flooding involving the overflow of storm sewer systems which is usually caused by inadequate drainage following a heavy rain. Although improvements continue to be made to the city's storm water collection/wastewater system, there are still several areas of the city that can experience localized street flooding during an extremely heavy rain.

New Bedford is not vulnerable to riverine or flash flooding.

### 4.4.2 CONCEPT OF OPERATIONS

The National Weather Service Forecast Office and the New England River Forecast Center in Taunton issue a variety of flood-related watch and warning products. Of primary concern to New Bedford are coastal flood watches and warnings.

A Coastal Flood Watch is issued 12-36 hours in advance of possible coastal flooding. A Coastal Flood Warning is issued when there is widespread coastal flooding expected within 12 hours, more than just typical overwash.

The U.S. Army Corps of Engineers and the New Bedford Department of Public Infrastructure operate and maintain a flood control project (New Bedford Hurricane Barrier) in the city which provides a high degree of tidal flood protection for industrial and commercial properties along the city's waterfront.

The Emergency Operations Center (EOC) will be activated in a severe storm situation when the potential exists for coastal flooding of areas outside the Hurricane Barrier and poses a threat to life and property or when urban flooding is extensive enough to require public protection measures.

### **4.4.3 RESPONSIBILITIES FOR FLOOD PLANNING & MANAGEMENT**

#### **A. Mitigation**

1. Identify areas in the community that are flood prone and define methods to minimize the risk. Review National Flood Insurance Maps.
2. Disseminate emergency public information and instructions concerning flood preparedness and safety.
3. Community participation in the National Flood Insurance Program.
4. Enforce building codes (e.g. Wetlands Protection Act) and discourage building in flood prone areas.
5. Maintain and periodically test flood control works.
6. Maintain plans for managing flood-related emergencies to which the city is vulnerable.

#### **B. Preparedness**

1. Provide ongoing public information on flood status and possible protective actions, as necessary.
2. Survey local coastal tide levels.
3. Review mutual aid agreements.
4. Arrange for all evacuation and sheltering procedures to be ready for activation if needed.
5. Carry out needed flood proofing and flood control measures such as closure of Hurricane Barrier gates and ensuring continued operations of waste water pump stations.
6. Place EOC personnel on standby during stage of flood 'watch' and monitor NWS/New England River Forecast Center reports. Activate EOC at appropriate levels as flood potential increases.
7. Place response agency personnel on standby.

#### **C. Response**

1. Conduct appropriate public warning/notification and public information activities.

2. Coordinate traffic control and proceed with evacuation of affected populations, as appropriate.
3. Open and staff mass care shelters, as needed.
4. Undertake, or continue to carry out, flood proofing and flood control measures
5. Conduct search and rescue operations, as needed.
6. Take other needed actions to protect life and property.

**D. Recovery**

1. Inspect all affected buildings for structural integrity.
2. Clear debris.
3. Conduct damage assessment activities.
4. Test water for potability and purify, if needed.
5. Address other public health and sanitation issues.
6. Coordinate re-entry of evacuees.
7. Apply for state and federal disaster relief funds if appropriate.

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## 4.5 HURRICANE

A hurricane is a type of tropical cyclone - the general term for all circulating weather systems (counterclockwise in the Northern Hemisphere) over tropical waters. Tropical cyclones are classified as follows:

Tropical Depression - an organized system of clouds and thunderstorms with a defined circulation and maximum sustained winds of 38 mph (33 knots) or less.

Tropical Storm - an organized system of strong thunderstorms with a defined circulation and maximum sustained winds of 39 to 73 mph (34-63 knots).

Hurricane - an intense tropical weather system with a well-defined circulation and maximum sustained winds of 74 mph (64 knots) or higher.

Of all emergencies/disasters that can affect our area, hurricanes provide the most lead warning time.

### 4.5.1 HAZARD AGENTS AND LOCAL VULNERABILITY

The three major hazards produced by a hurricane are the storm surge, high winds and rainfall.

Storm Surge. The storm surge is a great dome of water that sweeps across the coastline near where the eye of the hurricane makes landfall. The mean water level may increase 15 feet or more. The advancing storm surge combines with the normal astronomical tide to create the hurricane storm tide. In addition, wind waves that can average 5 to 10 feet high are superimposed on the storm tide. This buildup of sea water level can cause severe flooding in coastal areas. Additionally factors impacting on storm surge level include the forward speed of the hurricane, landfall location and high tide.

As part of its Massachusetts Hurricane Evacuation Study, the U.S. Army Corps of Engineers has provided the city with a storm surge inundation (flood) and evacuation maps for use in evacuation planning. These maps are the result of storm surge computer modeling (SLOSH) performed by the Corps and the National Hurricane Center indicating "worst case" potential flooding.

The New Bedford Hurricane Barrier is designed to provide flood protection to most of the city. However, SLOSH modeling indicates that surges generated by Category 4 hurricanes with forward speeds greater than 40 MPH can exceed the design height standards of the Barrier. Although storms of this nature are extraordinarily rare events, their occurrence is possible.

High Winds. Hurricane-force winds (74 mph or more) can destroy poorly constructed buildings, as well as downing trees and power lines. Debris, such as signs, roofing material, siding, and small items left outside, become flying missiles in hurricanes.

Additionally, there is the potential for hurricane-spawned tornadoes, working around the fringes of a hurricane, that can cause further damage.

Rainfall. A typical hurricane can bring 6 to 12 inches of rainfall to the area it crosses.

While heavy rainfall has only minor influence on the storm surge water levels, it can easily surpass storm drainage capabilities resulting in street (urban) flooding.

Typically, the following factors apply to hurricanes impacting the New Bedford (and New England) area:

- the highest storm surge will occur to the right/east of a hurricane track (in south coastal areas)
- the highest winds will occur to the right/east of a hurricane track
- the heaviest rain will occur to the left/west of a hurricane track

#### **4.5.2 CONCEPT OF OPERATIONS**

A hurricane threatening New Bedford will require the coordinated actions of local government agencies, disaster organizations and emergency services working together to protect the lives and property of the city's residents. The city's Emergency Operations Center (EOC) is the place where the mayor, executive staff and heads (or alternates with decision-making powers) of departments and agencies with responsibilities under this plan gather to direct and control necessary emergency operations.

The Emergency Management Director, working with and under orders from the Mayor, is responsible for coordinating all agencies involved in providing services necessary to preserving life and property

The New Bedford Emergency Management Department (NBEMA) is responsible for ongoing monitoring of tropical weather and storms during hurricane season. The Emergency Management Director will inform the Mayor of any storms which may potentially impact the city and schedule briefing sessions of the Emergency Operations Group as appropriate.

The National Weather Service/Tropical Prediction Center will issue a hurricane watch when a hurricane or hurricane conditions pose a possible threat to coastal areas generally within 36 hours. A hurricane warning is issued when direct hurricane conditions are expected to occur in any given location within 24 hours. For Massachusetts a "warning" is usually established when a storm has reached 40 North Latitude (Long Island, N.Y.).

While the Emergency Management Director will activate the EOC at appropriate levels with Emergency Management Department staffing during the approach of a hurricane, the Mayor will order full activation of the EOC at an appropriate time to direct coordinated operations.

The Emergency Management Department maintains a standalone Hurricane Emergency Plan which provides detailed information on hurricane-related actions including warning, public information, evacuation and sheltering

### **4.5.3 RESPONSIBILITIES FOR HURRICANE PLANNING AND RESPONSE**

#### **A. Mitigation**

1. Develop and disseminate emergency public information and instructions concerning hurricane preparedness and safety.
2. Encourage participation in the National Flood Insurance Program.
3. Develop and enforce local building codes to enhance structural resistance to high winds and flooding. Build new construction in areas that are not vulnerable to direct hurricane effects.
4. Maintain flood control systems.
5. Maintain plans for managing all hurricane emergency response activities. Departments and agencies with task assignments under this plan should prepare and revise emergency plans and implementation procedures for their respective organization, and keep same easily accessible.

#### **B. Preparedness**

1. Test communications and warning systems periodically and maintain in good working order
2. Review mutual aid agreements
3. Test auxiliary power systems (fixed and portable generators) on a regular basis and maintain in good working order.
4. Designate suitable hurricane shelters and make them known to the public. Resurvey periodically.
5. Coordinate local release of hurricane emergency public information throughout the watch and warning phase.
6. Heads of departments will provide for the protection of facilities and personnel under their control and ensure the preparation and availability of department resources (manpower, equipment and supplies).
7. Prepare to coordinate the possible evacuation and sheltering of populations from areas which are expected to suffer direct hurricane effects including alternate transportation systems and locations of special needs facilities.

## C. Response

### 1. Activate the Emergency Operations Center (EOC)

Heads of departments and agencies which are part of the Operations Group will ensure their presence in the EOC when activated. Arrangements will be made for:

- a. EOC staffing by alternate(s), with decision-making authority, for extended operations
- b. Operations of respective department or agency during their absence from regular bases of operation.

### 2. Activate warning/notification systems to inform public of protective measures to be taken including evacuation where appropriate.

### 3. Open and staff mass care shelters.

### 4. Evacuate at-risk population

- a. Define areas where evacuation of population will be ordered/recommended based on severity of storm.
- b. Identify facilities where special evacuation considerations, i.e. individual/advance notification and transportation arrangements, are required (schools, elderly housing, medical/institutional facilities, etc.)
- c. Implement and execute evacuation of affected populations as soon as the executive decision has been made that evacuation will take place.
- d. Provide for traffic direction and control to affect evacuation; limit access to evacuated areas to authorized personnel only.
- e. Provide information to the public, through local media, on such topics as
  - areas of ordered/recommended evacuation
  - location of shelters
  - alternate transportation available for those without vehicles

### 5. Coordinate the transportation, reception, shelter and care of evacuees. Refer to *Resource Manual (Core Functions)* for information regarding transportation providers.

### 6. Establish field command post(s), if necessary, with communications links to the EOC.

### 7. Provide ongoing status and situation reports to the EOC by response agencies in the field.

### 8. Establish liaison and lines of communications with local electric utility.

9. Anticipate the need to coordinate the emergency response for such contingencies as:
  - a. hurricane-related injuries
  - b. downed trees, power lines and other obstacles
  - c. loss of electrical and telephone service for extended period of time
  - d. arcing wires and other fire hazards
  - e. traffic accidents
  - f. loss of traffic signalization/controls
  - g. flooding and road washouts
  - h. needed search and rescue operations
  - i. building and structure collapse
  - j. waste water system problems
  - k. water contamination
  - l. looting and other criminal activity

Response actions will include:

- a. Provide for continued operation of water/waste water systems, as long as safety allows
- b. Attend to auxiliary generators at critical public facilities. Consider powering such by auxiliary generator prior to loss of commercial electrical power.
- c. Establish alternate means of communications with response agencies and personnel in the event telephones become inoperable.
- d. Medical response and treatment
- e. Search and rescue activities
- f. Fire suppression and prevention
- g. Traffic control (expedition of flow or access limitation or restriction, as well as at hazardous intersections having lost signalization)
- h. Address public health hazards posed by flooding, water contamination, etc.
- i. Police surveillance to prevent looting and other criminal acts.
- j. Ongoing public information dissemination through local media
- k. Initiation of debris removal operations as soon as it is safe to do so.

Debris removal operations will be conducted in accordance with established priorities. Preference should be given to access to hospitals, fire stations, other critical facilities and main streets.

10. Provide periodic situation reports (SITREPS) to MEMA.
10. Initiate preliminary damage assessment activities.

**D. Recovery**

1. Continue coordination of agencies involved with response/recovery operations, such as:
  - a. debris removal
  - b. public protective actions
  - c. health and sanitation
2. Inspect damaged buildings, bridges, etc, for structural integrity.
3. Coordinate re-entry of evacuees and deactivation of shelters.
4. Address public health and sanitation issues.
5. Conduct damage assessment activities.
6. Provide disaster victims with housing, food, medical services, etc. Establish disaster recovery centers to provide information and assistance to victims.
7. Ensure mental health needs of both disaster victims and workers are met (crisis counseling, critical incident stress debriefing, etc.)
8. Coordinate security for damaged residential and commercial property, as well as areas without electricity.
9. Apply for state and federal disaster relief funds, if appropriate.

## **4.6 TORNADO**

A tornado consists of a violent whirling wind accompanied by a funnel-shaped cloud. Usually, they are associated with severe weather conditions such as thunderstorms and hurricanes.

### **4.6.1 HAZARD AGENTS**

Tornadoes are fierce phenomena which generate wind speeds between 100 and 300 mph or more. However, the majority of tornadoes generate winds of 100 miles an hour or less. Tornado season is generally March through August, although tornadoes can occur at any time of year. They tend to occur in the afternoons and evenings, most often between 3:00 PM and 9:00 PM.

The damage from a tornado is a result of the high wind velocity and wind-blown debris.

### **4.6.2 LOCAL VULNERABILITY**

While tornado frequency in the state is highest in Worcester County and westward, any area of the state including New Bedford could be impacted by a tornado. July and August are the periods of highest probability.

Like earthquakes, the location of tornado impact is totally unpredictable; however a tornado's approach does provide a short time, (minutes or less), to take shelter in a basement, inner room of a building, deep ditch, or some such location.

### **4.6.3 CONCEPT OF OPERATIONS**

Detection of weather conditions favorable to tornado activity by the National Weather Service results in issuance of Tornado Watches and Warnings.

A Tornado Watch is issued when tornadoes and other kinds of severe weather are possible in the next several hours in or near a specified geographical area.

Tornado Warnings are issued when a tornado has been spotted, or that Doppler radar indicates a thunderstorm circulation which can spawn a tornado, in a given area.

New Bedford Emergency Management will monitor these watches and warnings and disseminate this information to other appropriate local response departments and organizations. When a tornado warning is issued for the area including the city of New Bedford, the Emergency Operations Center (EOC) will be activated on a standby basis by Emergency Management Department personnel to monitor the situation and make appropriate notifications.

If the city is impacted by a tornado, the EOC will be fully activated to coordinate response and recovery operations.

#### **4.6.4 RESPONSIBILITIES FOR TORNADO PLANNING AND MANAGEMENT**

##### **A. Mitigation**

1. Develop and disseminate emergency public information and instructions concerning tornado safety, especially guidance regarding in-home protection and evacuation procedures, and locations of mass care shelters.
2. Strict adherence should be paid to building code regulations for all new construction.
3. Maintain plans for managing tornado response activities.

##### **B. Preparedness**

1. Designate appropriate shelter space in the community that could potentially withstand tornado impact.
2. Periodically test and exercise tornado response plans.
3. Maintain response resources in a state of readiness.
4. Put emergency management personnel on standby at “tornado watch” stage.

##### **C. Response**

Because it is likely that a tornado could bring about one of more of several secondary disaster conditions, it is necessary that response agencies and personnel be prepared to respond to any of the following situations:

- Building collapse
- Major transportation accidents
- Power loss for an extended period of time
- Fire and/or explosions
- Hazardous materials incidents

1. At “tornado warning” stage, issue appropriate warnings and recommended public protective actions.
2. Activate the EOC.
3. Dispatch assessment teams and begin any needed search and rescue activities.
4. Activate emergency medical response; triage and treatment of casualties
5. Initiate needed fire suppression and hazardous materials control activities

6. Open and staff mass care shelters. Shelter evacuees.
7. Evacuate people endangered by threat of building collapse, flooding, hazardous materials incidents, etc.
8. Conduct needed traffic control activities (expedition of flow; access limitation or restriction).
9. Conduct debris clearance/removal operations.
10. Activate mutual aid agreements, as needed.
11. Take measures to guard against further injury from such dangers as ruptured gas lines, downed trees and utility lines, debris, etc.
12. Address public health hazards and concerns.
13. Address animal control issues
14. Provide appropriate security and surveillance to affected areas to prevent looting and other criminal activity.
15. Conduct ongoing public information and instructions activities.
16. Acquire needed emergency food, water, fuel, and medical supplies.
17. Take measures relating to the identification and disposition of remains of the deceased.

**D. Recovery**

1. Continue debris clearance operations
2. Restore utility and other essential services
3. Conduct damage assessment of public and private property.
4. Inspect damaged structures prior to reentry of the public.
5. Demolish unrestorable and/or dangerously damaged buildings.
6. Provide security to structures that are uninhabited.
7. Provide short and long-term food, water, clothing, shelter, medical care and other necessary assistance to victims.
8. Coordinate re-entry of evacuees.
9. Address public health and sanitation issues. Monitor long-term hazards.

10. Establish disaster recovery centers for victims.
11. Apply for state and federal disaster relief funds.
12. Assist in conducting and/or coordinating overall long-term rehabilitation and reconstruction of area.

#### **4.7 URBAN FIRE/WILDFIRE**

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## **4.8 WINTER STORMS**

Winter Storms, which are the most common and familiar local natural hazard, include snow storms and ice storms

Snow storms are characterized by the presence of the precipitation for which they are named and can range in severity from light intermittent flurries to the perilous blizzard. A blizzard is a condition in which the following are expected to prevail for 3 hours or more: 1) sustained winds of 35 mph or greater, and 2) considerable falling or blowing snow reducing visibility to less than 1/4 mile.

Ice storms are characterized by freezing rain which forms a layer of ice on roads, power lines, and other objects. Sleet differs from freezing rain in that it features solid grains of ice that are formed by the freezing raindrops as they fall. In most cases, sleet is a transitional type of precipitation, but if enough sleet accumulates on the ground it can pose a serious hazard.

Both snow and ice storms are measured by the severity of their effects, amounts of precipitation, and other meteorological factors. In areas such as New England where snowfall is common, accumulation of up to six inches is not considered a serious hazard, and little official note is made of a snowstorm until and unless it reaches greater proportions.

Freezing rain occurs when the ground temperature is below freezing, but precipitation is in liquid form and freezes upon impact. Winter storm warnings are issued when significant and possibly damaging accumulations of ice are expected. Freezing rain, because of its threat to traffic and above ground utility lines, elicits more concern and warnings from officials than comparable amount of snow. Severe freezing rain can last for hours and leave objects covered with ice several inches thick. Ice storm conditions occur when extended periods of freezing rain cause heavy accumulations of ice resulting in extensive damage to trees and power lines.

### **4.8.1 HAZARD AGENTS**

Snowstorms are considered a serious threat in our area when they begin to approach blizzard proportions. Although the majority of blizzards and ice storms cause more massive inconvenience than they do serious property damage, injuries or deaths. However, periodically a storm will occur which is a true disaster and necessitates intense, large-scale emergency response.

All types of winter storms bring about dangerous and often disastrous conditions. Ice and snow storms cause traffic-related deaths and injuries. Thick layers of ice on tree limbs and utility cables cause them to collapse, bringing about property damage, injuries, and large-scale power outages. Coastal snow storms bring with them tidal surges and flooding which also result in injuries and property damage.

Victims of winter storms fall into these categories: one-third of winter storm deaths are as a result of automobile and other accidents; another one-third are attributed to overexertion and resulting heart attacks; ten percent are due to overexposure and fatal freezing; and the remainder to such causes as home fire, carbon monoxide poisoning in stalled cars, falls on ice, electrocution from downed wires, and building collapse.

#### **4.8.2 LOCAL VULNERABILITY**

Many winter storms have paralyzed areas of Massachusetts in this century; some of the most memorable having occurred in 1920, 1940, 1969 and 1978.

The so-called “Blizzard of ‘78” had a major impact on New Bedford. The city has also been affected by numerous major snowfalls during the past several years, including the so-called Blizzards of ‘93 and ‘96, and will continue to experience such events.

#### **4.8.3 CONCEPT OF OPERATIONS**

A winter storm is very challenging to emergency management personnel because, even though it has usually been forecast, there is no certain way of predicting its length, size or severity. Consequently, the city must maintain and implement policies and procedures governing school and city office closings, recommending private sector closings, road use, parking and other factors that could affect the management of a serious snowstorm.

It is also critical that all snow management equipment, supplies and personnel be in place and ready to respond to a winter storm emergency.

New Bedford Emergency Management receives National Weather Service winter weather advisories and warnings and distributes this information to local government departments and agencies including the various public safety and school departments as well as departments involved in snow removal operations.

The local Emergency Management Director, under the direction of the Mayor, is responsible for coordinating all winter storm emergency activities. The Director will coordinate the operation of the EOC and local agencies involved in providing services necessary to preserving life and property.

The Mayor will direct the discontinuance of non-essential local government operations, as needed, and recommend private-sector closures in the interest of public safety.

The Commissioner of Public Facilities, in consultation with the Mayor, will institute a snow removal parking ban and the towing of vehicles impeding same, as necessary.

#### **4.8.4 RESPONSIBILITIES FOR WINTER STORM PLANNING AND RESPONSE**

##### **A. Mitigation**

1. Develop and disseminate emergency public information concerning winter storms.
2. Maintain plans for managing all winter storm emergency response activities, including:
  - Winter Storm section of Comprehensive Emergency Management Plan
  - Snow and Ice Control Plan (DPF)
  - Individual department/agency snow emergency plans and procedures

##### **B. Preparedness**

1. Ensure readiness of warning/notification and communications systems.
2. Ensure that appropriate equipment and supplies, especially snow removal equipment, are in place and in good working order.
3. Review mutual aid agreements.
4. Designate suitable mass care shelters throughout the community and make their locations known to the public.
5. Implement public information procedures during "storm warning" stage.
6. Prepare to coordinate the possible evacuation and sheltering of populations from areas which may suffer the loss of electrical power or be vulnerable to storm surge.

##### **C. Response**

1. Institute snow removal parking ban
2. Broadcast storm warning/notification information and instructions, including parking ban information.
3. Initiate snow removal/ice control operations and removal of vehicles impeding same.
4. Conduct evacuation, reception, and sheltering activities as needed.
5. Conduct search and rescue operations, as needed.
6. Provide periodic Situation Reports (LOGOSITREPS) to MEMA Region II Office
7. Coordinate emergency response for such problems as:

- storm-related injuries
- fires
- downed power lines and trees
- power failures
- traffic accidents and tie-ups,.

8. Close roads, and/or limit access to certain areas, if appropriate.
9. Request mutual aid, as required.
10. Provide assistance to homebound populations needing heat, food, and other necessities.
11. Provide rescue and sheltering for stranded/lost individuals.
12. Provide ongoing public information activities including such topics as:
  - local government response operations,
  - personal health and safety information

**D. Recovery**

1. Work with utilities (electric and telephone) to ensure restoration based on established priorities.
2. Conduct debris clearance activities with priority given to downed power lines, obstacles on roadways, and snow and ice on roof susceptible to collapse.
3. Coordinate re-entry/return of any evacuees.
4. Conduct damage assessment activities.
5. Monitor public health and sanitation threats and take appropriate actions.
6. Provide security for temporarily abandoned and/or damaged public and private property.
7. Provide short and long-term assistance to victims with housing, food, clothing, medical care and other issues.
8. Apply for federal and state disaster relief funds if there is a Presidential declaration.
9. Continue public information activities, as needed.

*Sections 4.9 and 4.10 Reserved for Future Use*

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## **TECHNOLOGICAL HAZARDS**

### **4.11 CIVIL DISTURBANCE**

Civil disturbances include incidents such as of violent protests, demonstrations, illegal assemblies, strikes resulting in violence, and riots that are intended to disrupt a community to the degree and generally associated with controversial political, judicial, or economic issues and/or events. Civil disturbances usually start within a small geographical area and, with effective initial response, can be contained and resolved within that confined area.

#### **4.11.1 LOCAL VULNERABILITY**

Incidents of civil disturbance are most likely to occur in communities characterized by populations with low incomes, ethnic diversity, housing and employment issues, and in areas where groups exist that have a propensity for instigating social protests. New Bedford has experienced civil disturbances in the past and will continue to be vulnerable to such occurrences.

#### **4.11.2 CONCEPT OF OPERATIONS**

The Police Department will be the lead agency for responding to a civil disturbance incident. The Police Chief, or his designee, will serve as the Incident Commander. Based upon the prevailing conditions and the progress of the threat, EOC activation will be directed by the Mayor.

Depending on the situation, the city may establish a task force headed by the Mayor or designee to discuss concerns and strategies relative to civil disturbance incidents. Provision for emergency meetings of the task force in time of increased tensions is advisable. Task force membership may include the Mayor, Police Chief, Emergency Management Director, Fire Chief, EMS Director, Community Services Director, School Superintendent (and/or representatives of the previously mentioned individuals), representatives of local social services agencies, clergy, and ethnic community leaders.

#### **4.11.3 RESPONSIBILITIES FOR CIVIL DISTURBANCE PLANNING AND RESPONSE**

##### **A. Mitigation**

1. Make efforts, in cooperation with the community at large, to address root causes of civil unrest such as unemployment, substandard housing, lack of public services, ethnic disharmony and communications barriers.
2. Establish 'neighborhood watch' groups to report on conditions that could lead to a civil disturbance incident.
3. Address indications of civil unrest before they occur.

4. Maintain plans to deal with all aspects and degrees of civil unrest.

**B. Preparedness**

1. Define areas and issues affecting the community that could be vulnerable to civil disturbance incidents.
2. Plan 'confinement area' limits which will prevent civil disturbance incidents from spreading.
3. Designate a location for an Incident Command Post in each of these confinement areas.
4. Plan an 'access control' area just outside of each 'confinement' area with communication between the two areas.
5. Create a police staffing plan for civil disturbance incidents.
6. Create dedicated access routes to these areas for emergency response personnel.
7. Ensure that evacuation routing, transportation, and shelter will be available for civil disturbance victims.
8. Coordinate training for public safety personnel on civil disturbance response.

**C. Response**

3. Respond to civil disturbance incidents with a strong police presence.
2. Establish communications between the Incident Command Post and the EOC if the EOC is activated.
3. Convene "Task Force".
4. Set up a media center and initiate Public Information activities.
5. Establish 'confinement' and 'access control' areas.
6. Activate mutual aid if needed.
7. Provide evacuation and sheltering services for victims.

**D. Recovery**

1. Maintain security to ensure public safety.
2. Reduce enhanced security gradually over a period of several days.
3. 'Task Force' establishes policies to mitigate against future incidents.

## 4.12 DAM FAILURE

Dam failures or overflows, although infrequent occurrences, commonly result from periods of intense rainfall and prolonged flood conditions. They can also result from earthquake, equipment malfunction, sabotage, and accidental and/or undetected structural damage.

There are over 2,500 dams in Massachusetts which, on the state level, are regulated by the Massachusetts Department of Conservation and Recreation (DCR). DCR classifies each dam in terms of potential loss of human life or property damage in the event of failure or improper operation. Classifications are Class I (High Hazard), Class II (Significant Hazard) and Class III (Low Hazard)

### 4.12.1 HAZARD AGENTS AND LOCAL VULNERABILITY

The potential for danger from dam failure or overflow is the flooding of areas immediately downstream which could result in loss of life and/or damage to property.

DCR indicates the following dams are located within the city of New Bedford or under local government control:

#### Buttonwood Park Pond Dam, Buttonwood Park (MA03067) - Class II – Significant Hazard

This dam is located on the south side of the Buttonwood Park Pond under Fuller Memorial Parkway and regulates the southerly flow of water through Buttonwood Brook. It is classified as a Significant Hazard dam due to downstream development in the area.

Failure of this dam could result in flooding of section of Buttonwood Park south of the pond including the Zoo. It is not known what impact a failure would have on neighboring residential areas.

#### Turner's Pond Dam, New Plainville Road (MA01152) - Class III – Low Hazard

This dam is located at the southwestern end of Turner's Pond on New Plainville Road at the Dartmouth town line. It is classified as a Low Hazard dam. Failure of the dam is not expected to result in significant property damage or any loss of life.

#### New Bedford Reservoir Dam, Town of Acushnet (MA01014) - Class I – High Hazard

The New Bedford Reservoir Dam is located in the Town of Acushnet at the headwaters of the Acushnet River and is under the control of the New Bedford Department of Public Infrastructure (DPI). Although located primarily in a rural and agricultural area, there is a residential development approximately one mile downstream. For this reason, the dam is classified as a High Hazard.

A failure of this dam could result in extensive property damage in the Town of Acushnet or loss of life. DPI maintains an Emergency Action Plan for this dam in accordance with state regulations.

#### **4.12.2 CONCEPT OF OPERATION**

Natural events or structural issues which may compromise a dam's integrity should be monitored by dam owners (DPI) and local public safety officials.

Dam failure or overflow with subsequent flooding to downstream areas, and the actions to be taken, are classified as one of three types based on advance warning and onset of the hazard. The warning types are:

- Type 1: Slowly developing condition
- Type 2: Rapidly developing condition
- Type 3: Imminent or Instantaneous failure

The following basic measures are to be taken for each of these three types of warning conditions:

##### Type 1: Slowly developing condition

1. Activate EOC at an appropriate operational level
2. Establish Command Post at or near dam site.
3. Activate communication networks and establish communications with Command Post.
4. Release emergency public information
5. Make appropriate notifications, including:
  - a. MEMA Regional Headquarters
  - b. Department of Conservation and Recreation
  - c. American Red Cross Area Office
  - d. Town of Acushnet (New Bedford Reservoir Dam)
  - e. Potentially affected population.
6. Review Plans for evacuation and sheltering
  - a. Evacuation (routes, notification, alternate transportation, etc.)
  - b. Sheltering (location, staffing, opening time, etc.)
7. Place appropriate emergency response agencies on “stand-by”

##### Type 2: Rapidly developing condition

1. Establish 24-hour communications from dam site Command Post to EOC.
2. Assemble, brief and assign specific responsibilities to emergency response agencies.
3. Release emergency public information.
4. Obtain and prepare required vehicles/equipment for movement.
5. Prepare to issue warning.

Type 3: Practically instantaneous failure

1. Issue warning.
2. Begin immediate evacuation of downstream areas
3. Commit required resources to support evacuation.
4. Notify
  - a. MEMA Regional Headquarters
  - b. American Red Cross
5. Activate shelters
6. Initiate other measures as required to protect lives and property.

#### **4.12.3 RESPONSIBILITIES FOR DAM FAILURE PLANNING AND RESPONSE**

##### **A. Mitigation**

1. Appropriate local government agencies will be familiar with technical data and other information applicable to dams that impact or are under the control of the City of New Bedford, including the possible effect on downstream areas.
2. Determine minimum notification time for down stream areas.
3. Dams should be inspected periodically and monitored regularly for potential failure. Recommended/needed repairs should be attended to promptly.

##### **B. Preparedness**

1. Develop warning/notification systems for use in areas potentially vulnerable to dam failure impact.
2. Establish procedures for monitoring dam site conditions at first sign of any irregularity that could precipitate dam failure.
3. Identify special needs populations at risk, evacuation routes, and shelters for dam failure response.
4. Maintain in readiness such equipment and supplies as sandbags, temporary dikes, and other items which could be used to lessen or deflect dam failure impact.

##### **C. Response**

1. Disseminate warning/notification of imminent or occurring dam failure.
2. Coordinate evacuation and sheltering of affected populations.

3. Dispatch search and rescue teams.
4. Coordinate the management of secondary emergencies such as fires, power failure, traffic accidents, etc.
5. Acquire additional needed supplies and equipment not already in place. Activate mutual aid, if needed.
6. Establish incident command post as close to affected area as safely possible.
7. Provide security for evacuated public and private property.

**D. Recovery**

1. Coordinate recovery safety measures such as decontamination of water, sanitation activities, debris clearance, etc.
2. Coordinate re-entry of evacuees.
3. Conduct damage assessment activities.
4. Arrange for providing short and long-term assistance to victims in matters of food, clothing, housing, insurance, etc.
5. Initiate application for state and federal disaster relief funds, if appropriate.

#### **4.13 HAZARDOUS MATERIALS**

Because of the technological character of our society, and the proliferation of a variety of hazardous substances in industry, commerce, and everyday life, hazardous materials accidents have become a common occurrence. They are the most frequent, and among the most threatening, of all types of emergencies or disasters.

The City of New Bedford has developed a Hazardous Materials Emergency Plan to deal with these incidents.

Due to the extensive scope and content of this plan, it is structured as Part 5 of this Plan and exists as a stand-alone document.

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## **4.14 RADIOLOGICAL EMERGENCY PLANNING**

### **4.14.1 PLUME AND INGESTION ZONES**

There are eighteen towns and cities in Massachusetts – plus their host communities – that are within or service the 10 mile Emergency Planning Zones of the three nuclear power plants which impact the Commonwealth. All planning and procedures that address a potential accident at any of these nuclear facilities are fully covered by detailed Radiological Emergency Response Plans.

Additionally, Ingestion Pathway Zones extend out to 50 miles of the affected nuclear facility. For a certain period of time after a radiation release to the atmosphere occurs, areas within this Zone will be in the “ingestion pathway” of the radiation plume.

Most of Massachusetts is located within 50 miles of a commercial nuclear power station located in Massachusetts or adjacent state.

### **4.14.2 HAZARD AGENTS AND LOCAL VULNERABILITY**

The concern for communities within the “ingestion pathway” if an accident occurs at a nuclear power plant would be the possibility of radiation exposure through the food chain resulting from consumption of contaminated foodstuffs and water. This hazard is addressed through controlling access to contaminated animal feeds, decontaminating certain foodstuffs, diversion and storage to allow decay of short half-life radionuclides, destruction of contaminated foods, and testing of water supplies.

New Bedford is within the 50 mile Ingestion Pathway Zone of the Pilgrim Nuclear Power Station in Plymouth, Massachusetts.

Because there are no dairy cattle raised in New Bedford, contamination of feeds if not a concern. While there is little commercial agricultural activities in the city, non-commercial produce raising activity, primarily for personal consumption, takes place on residential properties in all areas of the city which could be subject to contamination.

The city’s water supply system consists of several open reservoirs that could be threatened by deposits from gaseous releases. However, the city’s High Hill Reservoir in North Dartmouth and Water Tower on Hathaway Road in New Bedford are covered/enclosed and could supply the city with water for approximately one week of normal consumption.

### **4.14.3 CONCEPT OF OPERATIONS**

Decisions on appropriate protective measures will be made by the Massachusetts Department of Public Health (MDPH). Implementing protective actions will primarily be the responsibility of state agencies including MDPH, Massachusetts Emergency Management Agency, Department of Environmental Protection, Department of Agricultural Resources, and the Department of Fish and Game.

Local organizations that will play a major role in ingestion pathway protection response activities include the Emergency Management, Public Health and Public Infrastructure (Water) Departments and the Public Information Officer.

#### **4.14.4 RESPONSIBILITIES FOR INGESTION PATHWAY PLANNING & MANAGEMENT (NUCLEAR POWER PLANT INCIDENT)**

1. Protect surface water supplies. Test and restrict water supplies, if recommended.
2. Disseminate public information concerning the need for decontamination measures or destruction of locally-grown produce.
3. Conduct continuous public information activities during emergency to keep public informed of current conditions and any other needed protective actions.

#### **4.14.5 RADIOLOGICAL PROTECTION**

A radiological emergency could call for the declaration of a National Security Emergency. Under such conditions, the need to detect and measure radiation may become vital to protect the health and safety of the public and maintain continuity of government.

Various radioactive materials are transported into, out of, and through the State. There is a realistic possibility for an occurrence of incidents or accidents in the transportation and use of these materials.

Currently there are three commercial nuclear power plants in and near the State which could pose a threat in the event of an uncontrolled release of radioactive material to the environment. Of concern locally is the Pilgrim Nuclear Power Station in Plymouth. This particular “ingestion pathway” hazard is addressed in the previous section.

#### **4.14.6 CONCEPT OF OPERATIONS**

Under conditions of a National Security Emergency, response to and from an uncontrolled radiological environment would require that the majority of protective warnings, guidance and measures be taken at the state and local levels of government initially.

In the event of a serious peacetime radiological emergency, this community would receive assistance from state and federal governments and other local jurisdictions and from the commercial nuclear power industry if applicable.

The state will provide technical guidance and assistance in the development, implementation and maintenance of this plan.

The organization for response to a radiological emergency condition is dependent upon the type of hazard.

Specific responsibilities for responding to a radiological emergency are identified in separate Standard Operating Procedures that include:

- Radiological Defense (RADEF) and Radiological Monitoring Procedures for National Security Emergency
- Procedure for Transportation Radiological Accident

The Emergency Management Director is responsible for coordinating and ensuring the development and maintenance of this Emergency Management Plan as well as the above-referenced radiological incident procedures. All city departments and organization having emergency management responsibilities will develop appropriate implementation plans and procedures.

The management of radiological emergencies involves three critical activities, as follows:

- environmental surveillance
- personnel radiation exposure control
- protective measures

#### **4.15 TERRORISM**

A terrorist threat or act could occur with little or no warning. The threat may be based on the use of conventional weapons, explosives, or chemical, biological and radiological agents or devices.

Though such threats are often associated with international or national issues, effects would begin at the local level. Potential targets for terrorism include but are not limited to: government facilities, transportation facilities including airports, educational and research facilities, utilities and other critical infrastructure.

Support from state and federal agencies such as the Massachusetts State Police and Federal Bureau of Investigation is available for response and investigation of terrorist threats or acts. The Massachusetts Emergency Management Agency would coordinate state response to any terrorist act in the state, including recovery.

Awareness of the potential for terrorism is important for the public and government officials, as well as employees of the facilities that might be subject to terrorism.

**Part 6** of this Plan contains the Terrorism Response Plan which provides detailed information to guide community planning for terrorism.

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## **4.16 WEAPONS-RELATED INCIDENTS**

A weapons-related incident involves any hostile action taken against the United States by foreign forces which results in the destruction of military and/or civilian targets through the use of nuclear or other weapons.

### **4.16.1 HAZARD AGENTS AND LOCAL VULNERABILITY**

As long as human nature remains unchanged, there will be the threat, no matter how remote, of war-related attacks on the United States. The types of weapons that could be used are conventional, chemical, biological, and nuclear.

Regarding nuclear weapons: In the mid-1980s, EMA developed and released its *Nuclear Attack Planning Base – 1990 (NAPB-90)* document identifying those areas of the United States that were thought to be the most likely targets of a nuclear attack on the United States and providing state and local emergency planners with a credible estimate of the potential effects, specifically in terms of blast area, fire damage and fallout. Although this document is obsolete, New Bedford was not identified as a high risk area.

### **4.16.2 CONCEPT OF OPERATIONS**

A weapons-related incident could occur with little warning. The possibility, however, remains that in a certain type of situation an increase in international tensions would create a brief warning period during which measures could be taken to promote survival from the ensuing conflict.

An unexpected attack by conventional weapons, depending upon intensity, could have an effect similar to that of other types of major disasters such as earthquakes or tornadoes and the same type of response and rescue measures would be required.

The federal and state governments will have the primary responsibility for public and emergency public information. Information and instructions would be broadcast over the Emergency Alert System (EAS). The city will provide community-specific information to local media.

In case of a nuclear attack threat, the public would be advised to take shelter in home basements or assigned radiation-resistant shelters. It must be understood that no shelter can guarantee survival.

In case of attack by chemical weapons, the area should be evacuated limiting exposure to the immediate environment. If evacuation is not possible, shelter should be taken inside a building (shelter in place) with all ventilating, heating and cooling systems shut off, and doors and windows sealed.

In the event of the use of biological agents, public health agencies at the federal, state, and local levels would assess and respond to the situation providing technical assistance, resources such

as pharmaceuticals, and public information. The National Pharmaceutical Stockpile can be accessed by MEMA to augment state resources.

### **4.16.3 RESPONSIBILITIES FOR WEAPONS-RELATED PLANNING AND RESPONSE**

#### **A. Mitigation**

1. Review local warning/notification, sheltering, and evacuation and relocation plans.
2. Maintain contact with MEMA Area Office for information on weapons-related emergency threats/situations/
3. Prepare to stock radiation-resistant shelters with water, food, medical and sanitation supplies, and radiation detection equipment.

#### **B. Preparedness**

1. Maintain up-to-date training of emergency personnel regarding their assignments and responsibilities in the event of a weapons-related threat or actual event.
2. Identify, and have at readiness, all personnel, equipment, supplies, and facilities that would be utilized in the event of a weapons-related threat or actual event.
3. Have all in-place warning/notification systems in readiness.

#### **C. Response**

1. Provide warning/notification via in-place systems for population to tune to the Emergency Alerting System (EAS) for instructions and emergency information.
2. Depending on type of threat, evacuate affected populations or shelter in place.

#### **D. Recovery**

1. Area will be monitored (possibly on a long-term basis) to determine level of safety for returning evacuees.
2. Conduct re-entry of evacuees from shelters.
3. Establish priorities and procedures for rebuilding damaged areas.

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