Earthquake Hazard Annex

Mitigation:

The primary dangers to workers result from: being struck by structural components or furnishings, inadequately secured stored materials, burns resulting from building fires resulting from gas leaks or electrical shorts, or exposure to chemicals released from stored or process chemicals. Many of the hazards to workers both during and following an earthquake are predictable and may be reduced through hazard identification, planning, and mitigation.

There are many things you can do to prepare your workplace before an earthquake occurs:

- Pick "safe places". A safe place could be under a sturdy table or desk or against an interior wall away from windows, bookcases or tall furniture that could fall on you. The shorter the distance to move to safety, the less likely that you will be injured. Injury statistics show that people moving as little as ten feet during an earthquake's shaking are most likely to be injured.
- Practice <u>drop, cover, and hold-on</u> in each safe place. Drop under a sturdy desk or table and hold on to one leg of the table or desk. Protect your eyes by keeping your head down. Practice these actions so that they become an automatic response.
- Practice these safe earthquake procedures (i.e., drop, cover, and hold-on) at least twice a year. Frequent practice will
 help reinforce safe behavior. When an earthquake or other disaster occurs, many people hesitate, trying to remember
 what they are supposed to do. Responding quickly and automatically may help protect you from injury.
- Make a plan for workers to follow in the event of an earthquake and be sure that it includes the following
 precautions:
 - Wait in your safe place until the shaking stops, then check to see if you are hurt. You will be better able to help others if you take care of yourself first, and then check the people around you. Move carefully and watch out for things that have fallen or broken, creating hazards. Be ready for aftershocks.
 - Be on the lookout for fires. Fire is the most common earthquake-related hazard, due to broken gas lines, damaged electrical lines or appliances, and previously contained fires or sparks being released.
 - If you must leave a building after the shaking stops, use the stairs, not the elevator, and look for falling debris. Earthquakes can cause fire alarms and fire sprinklers to go off. You will not be able to rule out whether there is a real threat of fire, and the elevators may have been compromised. Always use the stairs.
 - If you're outside in an earthquake, stay outside. Move away from buildings, trees, streetlights and overhead lines. Crouch down and cover your head. Many injuries occur within ten feet of the entrance to buildings. Bricks, roofing and other materials can fall from buildings, injuring persons nearby. Trees, streetlights and overhead lines may also fall, causing damage or injury.
 - Inform workers of the plan and discuss earthquakes with workers. Everyone in your workplace should know what to do if an earthquake occurs. Discussing earthquakes ahead of time helps reduce fear and anxiety and lets everyone know how to respond.
 - Get training. Take a first-aid class from an organization such as the American Red Cross, American Heart Association, or National Safety Council chapter. Get training on how to use a fire extinguisher. Keep your training current. Training will help you to keep focused and know what to do when an earthquake occurs.
 - Perform a workplace survey, especially if you are in an area with a high risk of earthquakes, to identify potential hazards to workers if an earthquake occurs. Look for furniture or materials that could fall and strike workers or block means of egress, or cause a release of hazardous materials, or otherwise affect the health and safety of workers as a result of utility loss or system/structural failure. Follow mitigation techniques recommended by FEMA for equipment and furniture.

Response:

- 1. Follow Evacuation Plan:
 - If emergency response authorities indicate specifically to do so.
 - If emergency response authorities indicate there is time to do so.
 - If you can reach a safe location before an event is expected to occur.
 - When environmental conditions would not expose evacuees to a dangerous environment.
- 2. Follow up with a campus wide communication plan.
- 3. Alert MOU partnerships if space is needed for special populations.

Considerations

Aftershocks are smaller earthquakes that follow the main shock and can cause further damage to weakened buildings. After-shocks can occur in the first hours, days, weeks, or even months after the quake. Be aware that some earthquakes are actually foreshocks, and a larger earthquake might occur.

Recovery:

- 1. Allow campus operations and facilities teams to assess building damage.
- 2. Activate the campus recovery and reopening plan.
- 3. Activate the campus wide communication plan.