EMERGENCY ACTION PLAN

FOR THE

IRA A. FULTON COLLEGE OF ENGINEERING & TECHNOLOGY
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Purpose

This plan has been developed for the Brigham Young University Ira A. Fulton College of Engineering and Technology (hereafter referred to simply as college), and establishes actions that need to be taken for the following events:

- Active Shooter
- Bomb Threat
- Building Fire
- Chemical Spill or Release
- Earthquake
- Medical Emergency
- Power Outage
- Riot or Public Disturbance
- Tornado or Severe Weather

Duties of Employees in the College

All college personnel (employees and students) are to do the following whenever a college building must be evacuated:

1. If you are the last person to leave a room then turn the light(s) off and close the door;
2. Without endangering yourself, help children and disabled individuals safely evacuate;
3. Upon evacuating the Clyde Building (CB), Crabtree Building (CTB), Fletcher Building (FB), or Snell Building (SNLB) meet at the designated evacuation assembly area identified at the end of this plan;
4. Upon evacuating B66, B41, B38, or the PRL meet at a safe distance within view of the front entrance and wait until a representative from your Department (under the direction of your Department Chair or Director) dismisses you.

Faculty Members

1. Review the “Emergency Response Procedures Handout” found at the end of this plan with those students you teach. This is to be done at the beginning of each semester/term.

Department Chairs/Directors

Department Chairs/Directors are responsible for the following (delegates can perform these duties):

1. Designate an adequate number of Evacuation Wardens to help facilitate emergency evacuation;
2. Assign areas within the building for Evacuation Wardens to sweep in accord with the Emergency Action Plan training provided by Risk Management. This area should correspond with a path that leads the Evacuation Warden toward an exit so they can evacuate as quickly as possible;

3. Collect information from Evacuation Wardens following an evacuation. The information collected pertains to whether or not all individuals in their department successfully evacuated;

4. Relay information collected from Evacuation Wardens to college management and emergency responders when they arrive; and

5. Account for employees and students who have evacuated, and gather pertinent information, from those gathered, pertaining to the event.

Evacuation Wardens

Evacuation Wardens perform the following duties when an evacuation is needed and it is safe for the Wardens to perform these duties:

1. Check areas of buildings as directed by the Department Chair/Director to ensure individuals have vacated;

2. Make sure the doors are closed to the rooms that are checked;

3. Evacuate to the outdoor designated meeting area; and

4. Report findings of the sweep to the Department Chair (or representative), providing them with any pertinent information related to the event (e.g. presence of smoke in a particular area, individuals who were unable to evacuate, etc.).

Critical Shutdown Procedures

In order to prevent a more hazardous situation from developing, there situations that require critical shutdown procedures to be performed prior to evacuating an area. When such a need exists supervisors must ensure that those they supervise have been trained properly, and that the critical shutdown procedures are documented.

Procedures to Account for All Individuals

Individuals are accounted for when individuals designated by Department Chairs/Directors visit evacuation areas for their buildings and gather information to be reported back to Department Chairs/Directors. The information is then provided to college Dean’s and emergency responders.
Communication

Emergency services are summoned by dialing 911. Don’t use your telephone for non-emergency phone calls during an emergency since doing so can result in too much communication traffic and prevent critical calls from being made.

The last individual to leave a room turns off the lights, which indicates to Evacuation Wardens that the room is no longer occupied.

Students, supervisors and other employees can receive information regarding the status of an emergency and the recovery process from the following resources:

- Radio (KBYU 89.1 or 89.5 AM – for campus wide emergencies)
- Y Alert (university police notification system)
- E-mail
- Twitter
- Phone
- Signage
- Commercial radio or television
- Messenger
- Police

Evacuation

Building evacuation is required in the even to of a fire, any chemical release that affects the entire building, and following an earthquake (see earthquake section for details).

Follow the safest shortest evacuation route while exiting a building. Evacuation routes have been established for all faculty, staff, students, and visitors. **Evacuation routes are posted in corridors throughout the major college buildings along the main routes of egress.** These routes should be followed unless an unsafe condition blocks the path. If this occurs then follow the next shortest route. Individuals need to familiarize themselves with the location of exits when entering an unfamiliar building – the posted evacuation routes and walking around the floor(s) of the building will help.

Retrieval of Critical Items from a Secured Building

If critical item(s) have been left in an evacuated building then retrieval of the critical item(s) is possible if you are accompanied by an authorized individual and authorization for retrieval has been received from Risk Management, the college Dean’s office, and the authority having jurisdiction (usually Provo Fire Dept.).
EMERGENCY RESPONSE ACTIONS

Active Shooter

To survive an active shooter incident one must develop a **survival mindset** and a **course of action**. According to information found on the University Police website a survival mindset is a protective shield comprised of three components:

- Awareness
- Preparation
- Rehearsal

A course of action may include any or all of the following:

- **Figure out** the situation
- **Get out** to a safer area if you can
- **Call out** to the police
- **Hide out** if you are unable to get out
- **Keep out** the shooter by blocking doorways etc.
- **Spread out** (do not huddle together) and quietly develop a plan of action
- **Take out** the shooter. Assume the shooters intentions are lethal and be prepared to do whatever it takes (survival mindset) to neutralize the threat.

**Shots Fired**, an on-line video, explains the aforementioned concepts in detail. To view this video, go to [http://police.byu.edu/](http://police.byu.edu/) and click on the Shots Fired link.

**Flashpoint** is an on-line video regarding violence awareness. Awareness plus Action equals Prevention. To view this video, go to [http://police.byu.edu/](http://police.byu.edu/) and click on the Flashpoint link.

Bomb Threat

If you receive a suspicious package or envelope:

- Do not shake or empty the contents;
- Leave the package where it is - do not touch it; and
- Contact University Police (801-422-2222)
- If you are directed to leave the area, take your personal belongings (e.g. purse, lunch box, book bag, etc.) with you so they won’t have to be searched.
**Bomb Threats:** Most bomb threats will be received by a telephone call to a faculty or staff member in the building. If you receive a bomb threat by phone, collect as much information as possible from the caller. Consider gathering information such as that indicated on the Bomb Threat checklist which is located near the end of this plan. After gathering the information contact University Police (422-2222) relay the information. Also, notify the supervisor of the individual(s) for which the bomb threat is targeted and the Dean’s office (422-4327).

Immediate arbitrary evacuation upon initial receipt of a bomb threat is not recommended unless the caller indicates that detonation of the bomb is imminent, in which case the building fire alarm should be triggered to initiate an evacuation. The recommended approach is to have individuals examine their work areas for strange or suspicious items and then report any suspicious items to the University Police Department (422-2222). Individuals **MUST NOT TOUCH** any suspicious items. If a suspicious item is found (e.g. abandoned backpack or package) and it is thought to present an imminent threat then activate the automated building fire alarm system by pulling the handle of a fire alarm pull station and evacuate.

**Building Fire**

If a fire occurs in the building you are in then do one of the following as appropriate:

1. If the building fire alarm system has activated then evacuate;
2. If the building is equipped with a functional automatic fire detection system, but it has not activated, pull the nearest pull station handle (see image below) and evacuate; or
3. If the building doesn’t have a functional automated fire alarm system then begin yelling “Fire”, and continue to do so as you evacuate the building (e.g. buildings B38 and the PRL).
Do not use an elevator when evacuating.

As you evacuate, approach closed doors with caution. If the door has a window, peer through the window to ascertain conditions on the other side. If the door does not have a window make sure you briefly touch the door to feel if it is hot. Remember - while evacuating NEVER OPEN A HOT DOOR - a fire on the other side could blast through with tremendous force and heat. Do not attempt to go back to obtain personal items.

**Chemical Spill or Release**

Do not approach unknown chemical spills or releases - rather head away from them and call University Police (422-2222). This applies whether you are on campus outdoors or indoors. If you are outdoors then head up-wind.

Before using a toxic liquid or gas, laboratories must determine what the affected area would be should the liquid or gas container be breached or spilled and the contents released. An affected area is the area within a building where the released material could be present in airborne concentrations that are known to be harmful for individuals to inhale. If you need help making this determination then contact Risk Management (422-4468) or the college Health & Safety Officer (801-422-6589). Depending upon quantity and substance characteristics the affected area could extend from the immediate vicinity of a spill to an entire building for a release.

The primary response to a toxic liquid spill is to evacuate the affected area. If this involves the entire building then pull the nearest fire pull station handle or, if a pull station isn’t available, quickly inform the other occupants verbally. Laboratory personnel can enter the affected area to clean up a chemical spill if they use procedures they have developed for safely performing the work, keeping their exposure to below safe exposure limits. **Note: all routes of entry must be considered when addressing a spilled/released substance; this includes exposure by inhalation, skin absorption, ingestion, and injection.** The location of the spill will also need to be considered – a spill inside a functional laboratory hood needs to be treated differently than a spill on a lab bench (assuming equal quantities of the same chemical).

Some laboratories within the Clyde Building are equipped with a fixed toxic gas monitoring system (TGMS). The system is primarily used in association with compressed toxic gases that are being utilized for teaching and research purposes. This system is designed to help protect individuals by providing visual and audible signals when a hazardous gas concentration rises to predetermined levels. There are low and high alarm level settings. A yellow light signifies a low level alarm to which individuals working in the laboratory / department can respond and correct the issue. If a red light / high alarm level is reached then the affected area needs to be evacuated and University Police (801-422-2222) notified. The air pressure within laboratories should be negative relative to the surrounding corridors when all entry doors are closed (KEEP THE DOORS CLOSED). **Note: shutoff valves may be triggered and shut the flow of gas off when a high alarm level is reached, therefore the flicker of a red alarm light and an associated audible signal may only be momentary ~1 second and not require notification of University Police.**
Earthquake:

Prepare your work area before an earthquake occurs. Luckily, most of what you need to do to prepare your work area(s) involves standard lab safety principles and common sense.

As applicable, take the following precautions before an earthquake occurs:

1. Ensure you have backup copies of important information stored offsite.
2. Locate heavy objects on or near the floor; or secure them to the building structure.
3. Secure storage cabinets, shelving, etc. to prevent them from tipping over or moving in front of doorways and other critical paths.
4. Consider flying glass and falling object hazards in your area, and take measures to minimize the risk associated with both.
5. Latch storage cabinets.
6. Store chemicals securely and properly according to compatibility and manufacturer storage recommendations. Note: some chemicals may need to be stored in refrigerators or freezers that are provided with backup emergency power.
7. Minimize the volume of chemicals stored.
8. Use flexible hose connections when possible to convey gases and liquids.

In the event of an earthquake:

- Remain calm
- Position yourself under cover next to a sturdy object in a pre-selected location you have deemed the safest choice (away from glass & falling debris)
• Cover your head
• If you are outdoors stay away from glass, power lines, and telephone poles.

When an earthquake occurs remain in the facility until the tremors are over, then follow the earthquake response checklist found at the end of this document unless there is a fire or the building appears to be unstable in which case evacuate. Once you are outdoors don’t re-enter a building until cleared to do so by Risk Management, Physical Facilities, and the college Dean’s office. Do not flush toilets until told it is ok to do so because sewer lines may not be intact.

**Medical Emergency**

An emergency may occur that necessitates immediate first aid and/or subsequent medical attention. BYU Emergency Medical Services are equipped to handle breathing and other lifesaving problems, and have trained resuscitation teams.

As a “good Samaritan” you may provide first aid or CPR to a victim.

There are AED’s (defibrillators) located in some buildings across campus. Only use an AED if you have been properly trained, and your training is current.

**Dial 911 immediately** if there is a medical emergency. This will save time and could save the victims life.

**Power Outage**

1. In the event of a total or near-total loss of power to the building, it is essential for all building occupants to remain calm, especially if it is dark outside. Offer reassurance to the students and others in your area. Speak in a calm voice and offer appropriate assistance.
2. If it is determined that the loss of power is extensive and may last for an extended period of time, college management will notify the college community by the most expeditious or appropriate method and initiate an orderly evacuation of the building. Remember to collect your cold weather clothing if it is cold outside.
3. Using flashlights, Evacuation Wardens will need to be sure to conduct a thorough search of their assigned area to ensure that everyone has left.

**Riot or Public Disturbance**

If you observe a riot or public disturbance then you should immediately notify the University Police (422-2222) of the situation, unless they are already present. Be sure to distance yourself from the riot or public disturbance.
Tornado, or Severe Weather

In the event of a tornado or severe weather, the following procedure should be put into effect depending upon whether or not you are in a building, automobile, or in the open outdoors:

In a Building:

Go to the lowest basement floor if you are in a sturdy building. If there is no basement, go to the center of an interior room on the lowest level (closet, interior hallway) away from corners, windows, doors, and outside walls. Put as many walls as possible between you and the outside. Get under a sturdy table and use your arms to protect your head and neck. Do not open windows.  
http://www.fema.gov/hazard/tornado/to_during.shtm

In an Automobile

If you have time, get out immediately and go to the lowest floor of a sturdy nearby building, unless it is a mobile home. Note: *Mobile homes, even if tied down, offer little protection from tornadoes*.  
http://www.fema.gov/hazard/tornado/to_during.shtm

Never try to outrun a tornado in urban or congested areas in a car or truck. Instead, leave the vehicle immediately for safe shelter.

In the Open Outdoors

Lie flat in a nearby ditch or depression and cover your head with your hands. Be aware of the potential for flooding.

Do not get under an overpass or bridge. You are safer in a low, flat location.

*Note: flying debris from tornadoes causes most fatalities and injuries.*

http://www.fema.gov/hazard/tornado/to_during.shtm

TRAINING

Upon hire, all employees are required to review the Basic Emergency Procedures training presentation available through Learning Suite (https://learningsuite.byu.edu/), or some other equally effective means that is made available by your respective department. All training must be recorded and maintained by your Department office.

All Evacuation Wardens are to receive training from Risk Management regarding the duties they are to perform. *Note: the Basic Emergency Procedures training should be completed first.*
To practice evacuation procedures a fire drill will be performed at least once a year for each building. The drill will be coordinated with the Electric Shop, who in turn coordinates with Risk Management, University Police, and Provo Fire. Both Risk Management and University Police act as informants to Provo Fire so that emergency response teams are not sent to the drill.
Earthquake Response Checklist

Each of these items could be critical for the health and safety of the people in your area and the viability of your research. Please discuss these plans among yourselves and take whatever action is necessary to see that all issues are addressed.

During the Disaster

Do not leave the building until the tremors have stopped.
If you are outside, do not attempt to enter a building.
If you are in your car, stop immediately and do not continue to drive unless stopping will create a greater hazard.

After the Disaster – The First Thirty Minutes

- If safe to do so, turn off gas burners.
- Check quickly for fires, fire hazards, electrical hazards, and hazardous chemical releases.
  - If there are any fires, fire hazards, electrical hazards, or hazardous chemical releases then evacuate the building immediately, warning others as you leave. Meet at your designated meeting place.
- Follow any specific procedures your supervisor has developed.
- Account for everyone who was in the lab with you when the earthquake struck.
- Check for injured or physically limited people who might have trouble evacuating the building.
- Take emergency supplies (first aid kit, flashlights, etc.) to your designated meeting location.
- Close the laboratory door as you leave.
- Report crucial items or hazards to the individual in charge at your designated meeting location.
- Proceed to the designated meeting location for your building, if the location is safe.
  - Report crucial items or hazards to the individual in charge at your designated meeting location.

Recovery

Depending on the time and circumstances of the earthquake, you may be asked to stay out of your building for a few minutes to a few days – or indefinitely. Please take measures to plan accordingly.
Bomb Threat Checklist

Gender of Caller
☐ Male    ☐ Female

Questions
1. When is the bomb going to explode?
2. Where is it right now?
3. What does it look like?
4. What kind of bomb is it?
5. What will cause it to explode?
6. Did you place the bomb?
7. Why?
8. What is your name?
9. What is your phone number?
10. What is your address?
11. What is your age?

Did the caller appear to be familiar with the layout of the facility?  ☐ Yes    ☐ No

Callers Voice
☐ Calm     ☐ Laughing     ☐ Lisp
☐ Angry    ☐ Crying      ☐ Raspy
☐ Excited  ☐ Normal      ☐ Clearing
☐ Slow     ☐ Distinct    ☐ Crackling
☐ Rapid    ☐ Slurred     ☐ Deep
☐ Soft     ☐ Nasal       ☐ Disguised
☐ Loud     ☐ Stutter     ☐ Familiar

Did the caller have an accent?

Background Sounds
☐ Distant Noises  ☐ Office Noises  ☐ Local  ☐ PA System
☐ Street Noises  ☐ Motors        ☐ Machinery ☐ Music
☐ Voices        ☐ Factory       ☐ Animal(s) ☐ House Noises
☐ Factory      ☐ Animal(s)     ☐ Clear
☐ Voices        ☐ Factory       ☐ Booth

Threat Language
☐ Educated     ☐ Irrational    ☐ Taped
☐ Foul         ☐ Incoherent    ☐ Message read by caller.

Call Date:  
Time of Call:  

Emergency Action Plan  December 5, 2013
Evacuation Assembly Areas for Large Buildings

Designated meeting locations are indicated by each red x in the following diagrams:

- Clyde Building
- Fletcher Building
- South East
- Crabtree Building (CTB)