

Category:	Health and Safety	Number:	CHEM-HS-0002
Responsibility:	Department Safety Officer	Approval:	Chair, Department of Chemistry
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1. Background

Safety in chemistry labs is of the utmost importance in order to lower the risk of personal injury and damage to property in the event of an emergency. It is the goal of the Department of Chemistry to foster a culture of safety in its research labs for all faculty, staff, students, and visitors.

2. Purpose

The following document outlines the *guidelines* for evacuating the Cairns Family Health and Biosciences Research Complex and/or Mackenzie-Chown Complex and dealing with active experiments/chemical reactions in the Chemistry laboratories, including drying stills for organic solvents, in the event of an emergency evacuation of the laboratory(ies), building, or campus.

3. Scope

This policy applies to any and all laboratories overseen by the Chemistry Department be they research or teaching labs. This policy applies equally to laboratories that are located within the Cairns Family Health and Biosciences Complex and to those that are in the Mackenzie-Chown Complex.

4. Policy

4.1. Emergency Evacuation

4.1.1. Requirements

- Typically, the building fire alarm system is the signal to evacuate, although other signals such as verbal commands, activation of the emergency warning signs, or strobe lights can also be signals to evacuate.
 - The order to evacuate applies to anyone working in the labs or simply visiting.
 - **NOTE:** An emergency evacuation is different from a “Shelter in Place” order
- All laboratory personnel must be familiar with not only the various exits out of their labs but also alternate exits out of the lab and the building itself.
- Lab personnel should assist other individuals in vacating the lab and/or building when necessary
 - In the teaching labs it is the responsibility of the Lab Coordinator/Lab Supervisor and Demonstrators to ensure that the teaching labs are vacated and that all of the students in their charge are accounted for.

- Individuals are not to re-enter a building that is being evacuated to retrieve personal belongings or to assist individuals that may still be in the building. Individuals re-entering (or refusing to vacate) buildings are subject to fines by the Fire Department and they also place themselves in danger.
- Individuals who cannot evacuate the building must move to an “Area of Refuge” and notify Campus Security of their location using one of the wall-mounted emergency call boxes.

4.1.2. Active Chemical Reactions/Experiments

- In the event that an emergency evacuation is signalled, any active reactions **MUST** be secured in an effort to minimize damage to property or injury to emergency response personnel.
- Sources of heat should be extinguished/turned off and any vessels containing compounds that produce flammable vapours should be capped.
- Fume hood sashes should be pulled closed.
- Pyrophoric material should be securely sealed in a closed container to prevent any contact with water that may be used to fight the fire.

NOTE: It is acknowledged and understood that the reactions/experiments being conducted in our teaching and research labs are essential to furthering science and to educating our students. However, these benefits do not outweigh the potential danger that they pose to infrastructure or emergency personnel and as a result the reactions/experiments must be properly secured when an emergency evacuation order is issued. In the event of planned fire drills, reactions need only be secured to the point that it will be safe to leave them unattended for the duration of the fire drill.

4.1.3. Meeting Areas

- In order to account for the safety and security of Chemistry personnel in the case of an emergency evacuation of either the Cairns facility or of Mackenzie-Chown, meetings areas have been established so that individuals can be accounted for and their safety verified before they disperse.

4.1.3.1. Evacuation of the Cairns Health and Biosciences Research Complex

- In the event that the Cairns facility is evacuated Chemistry personnel are asked to congregate in the Zone 1 parking lot directly across from the Cairns Complex.
 - Care should be exercised when crossing University Road East as vehicles may still be utilizing that thoroughfare and emergency vehicles will be arriving along that road
- In the event that an evacuation of the Cairns Complex is necessary while the campus is experiencing inclement weather, Chemistry personnel are asked to meet in the open area outside of the Pond Inlet across from the D-Block elevator.

4.1.3.2. Evacuation of Mackenzie-Chown

- In the event that Mackenzie-Chown is evacuated Chemistry personnel are asked to congregate at the stairs in Jubilee Court leading up beside the Sankey Chamber.
- In the event that an evacuation of Mackenzie-Chown is required during the occurrence of inclement weather Chemistry personnel are asked congregate in the lobby area of the Decew Residence.

4.2. Emergencies in Chemistry Areas Requiring Evacuation

- In the event that the reason for evacuating either the Cairns Complex or Mackenzie-Chown was an incident in a Chemistry lab, lab personnel are required to secure the lab to ensure the safety of emergency personnel, and then evacuate the lab themselves.
- Once safely outside of the building the individuals from the lab where the incident occurred are to immediately contact Campus Security either in person or by calling ext. 3200 and informing them of the nature of the incident and any and all chemicals that may be involved so that Campus Security can relay this information to emergency responders
 - These same lab personnel should remain available to answer any questions that Campus Security or emergency responders may have

Amendments (revision history)

Date revised	Responsible
Enter date	Enter position/title