# FIRE SAFETY PLAN FOR:

Fire Testing Lab
Lakehead University
955 Oliver Rd
Thunder Bay
P7B 5E1

Reviewed without change - January 2023

Reviewed by:

Tiffany Moore Lakehead University Health & Safety Reviewed by:

Eric Nordlund
Director, Prevention
Thunder Bay Fire Rescue

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# **Chapter 1: Introduction**

As required by the Ontario Fire Code, Section 2.8, (Ontario Regulation 213/07 of the Ontario Fire Protection and Prevention Act, as amended), this Fire Safety Plan has been prepared by Lakehead University for *Fire Testing Lab*, 955 Oliver Road, Thunder Bay, Ontario.

The purpose of the plan is to provide safety information for all occupants in the event of a fire, to ensure the effective use of life saving features in the building, and to prevent fires from being initiated. This fire safety plan has been designed to suit the resources of *Fire Testing Lab*. This plan must be approved by Thunder Bay Fire & Rescue; however, Lakehead University is responsible for ensuring that the information provided in this fire plan is accurate and complete.

Information found within this Fire Plan includes: contact information, an audit of building resources, maintenance of building resources (as required by the Ontario Fire Code), building schematics, and an outline of responsibilities, emergency procedures, control and extinguishment of a fire, fire protection measure and fire hazards and prevention.

The Fire Protection and Prevention Act, Part VII, Section 28 states that any person who contravenes any provision of the fire code is guilty of an offence. If convicted a company or corporation is liable to a fine of not more than \$100,000. Any individual, director or officer of a corporation is liable for a fine of not more than \$50,000 or imprisonment for a term of not more than one year, or both.

The Fire Safety Plan shall be reviewed as often as necessary, but at intervals not greater than twelve (12) months, to ensure that it takes account of changes in use and other characteristics of the building. The Chief Fire Official is to be notified regarding any subsequent changes in the contents of the approved Fire Safety Plan.

This official document is to be kept readily available at all times for use by staff and fire officials in the event of an emergency

The approved location of the Fire Safety Plan for the <u>Fire Testing Lab</u> is the <u>Security Office</u>, <u>UC 1016</u>. In addition, copies will be kept in the Health & Safety Office and in the Fire Safety Plan Box located at the main entrance of the Fire Testing Lab.

# **Chapter 2: Audit of Human Resources**

| Building Owner                             | Lakehead University                           |
|--|---|
|  | 955 Oliver Road                               |
|  | Thunder Bay, ON P7B 5E1                       |
|  | Phone: 343-8110                               |
| President                                  | Dr. Moira McPherson                           |
|  | 955 Oliver Road                               |
|  | Thunder Bay, ON P7B 5E1                       |
|  | Phone: 343-8010 ext.8200                      |
| Vice President, Finance& Administration    | Kathy Pozihun                                 |
|  | Phone: 343-8010 ext.8383                      |
| Director, Physical Plant                   | Hugh Briggs                                   |
|  | Phone: 343-8010 ext.8790                      |
| Health & Safety, Office of Human Resources | Tiffany Moore                                 |
|  | Phone: 343-8010 ext.8806                      |
|  | Ursula MacDonald                              |
|  | Phone: 343-8010 ext.8671                      |
| Security Staff                             | On site 24/7, minimum 3 people                |
|  | Phone: 343-8911 (Emergencies)                 |
|  | Phone: 343-8010 ext.8569 (Non-emergency)      |
| Maintenance Staff                          | Physical Plant, available from 8am to 4pm     |
|  | (After hours contact Security)                |
|  | Phone: 343-8010 ext.8273                      |
| Cleaners                                   | Physical Plant, Ms Diane Michieli-Pedwysocki, |
|  | Facilities Manager                            |
|  | Phone: 343-8010 ext.8962                      |
|  | Physical Plant, Services Supervisor, Keith    |
|  | MacMillan                                     |
|  | Phone: 343-8010 ext.8968                      |
| Fire Alarm Monitoring Company              | Tbay Tel                                      |
|  | Phone number and passwords are held by        |
|  | Security Services (343-8010 ext.8569).        |

# **Chapter 3: Audit of Building Resources**

# 3.1 General Description

<u>Fire Testing Lab</u> is located at 955 Oliver Road is a non-combustible one (1)-storey building constructed in 2015.

The operating hours of the building are 8:30am to 4:30pm, Monday to Friday.

#### i. Occupancy and Use

Main Floor- Washroom, Burning Hall, Utility room, Corridor, Control Room, Janitor's closet.

#### ii. Fire Department Access

Firefighters will access the property via the Oliver Road.

## 3.2 Fire Alarm System

This building is not provided with smoke alarms.

## 3.3 Fire Hydrants

A private hydrant is provided to the northeast of the Fire Testing Lab.

# 3.4 Fire Extinguishers

Fire extinguishers are located throughout the building.

## 3.5 Emergency Power

This building is not equipped with emergency power.

#### 3.6 Main Electrical Disconnect

The main hydro disconnect switch is located in the Centennial Building Basement, hallway CB X0027. A secondary disconnect is located in the fire testing lab, room 004.

#### 3.7 Gas Shut-Off Valve

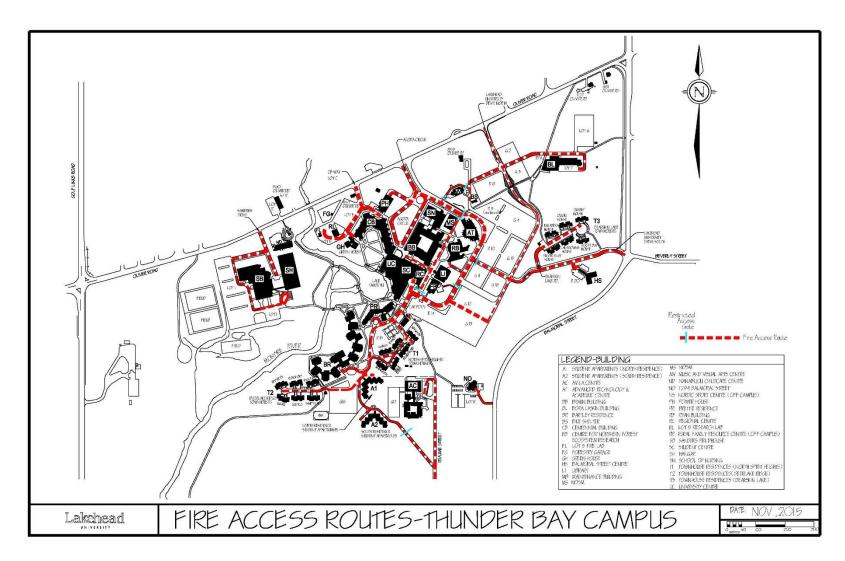
The main gas shut off valve for <u>Fire Testing Lab</u> is located outdoors on the northwest corner of the building, as shown on the site plan.

#### 3.8 Hazards

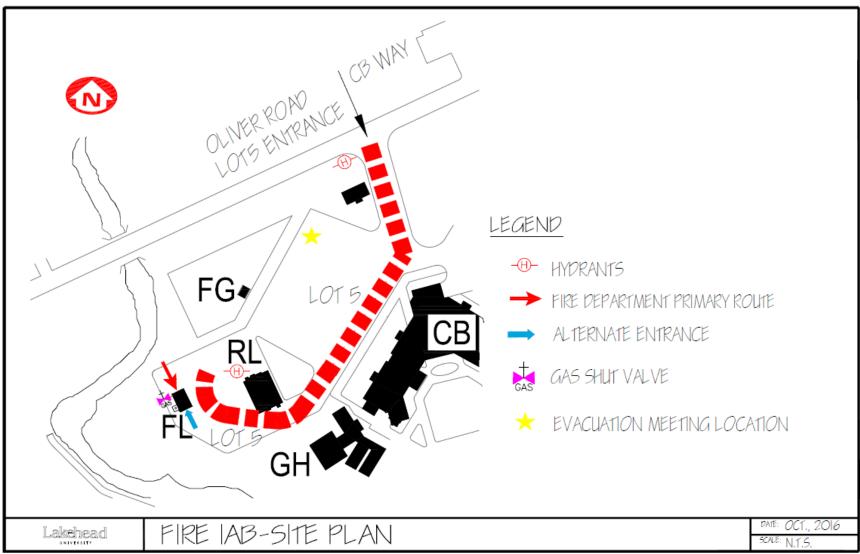
Large natural gas furnace will be used in this location.

# **Chapter 4: Building Schematics**

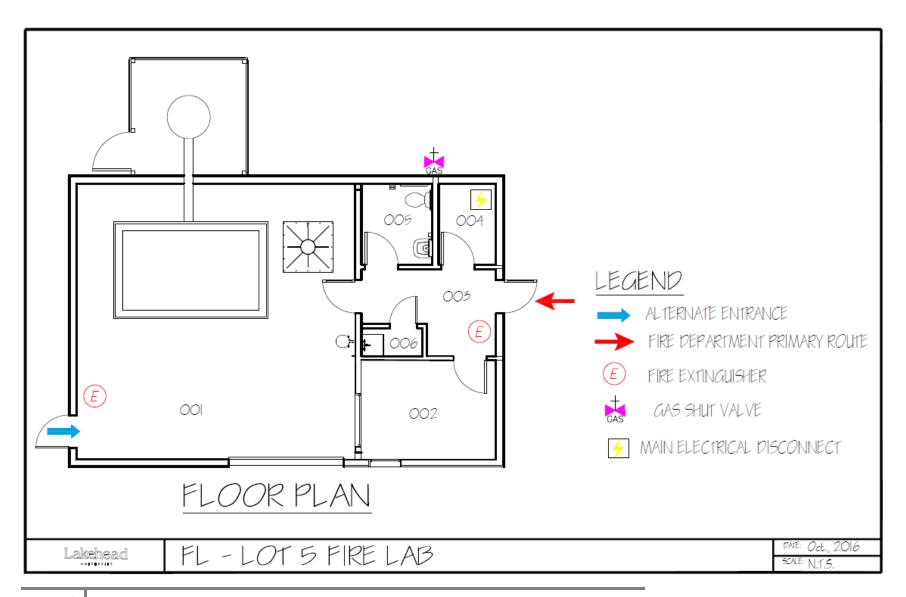
## **4.1 Fire Access Routes**



## 4.2 Site Plan



## **4.2 Floor Plans**



# **Chapter 5: Responsibilities & Emergency Procedures**

The preparation and implementation of a Fire Safety Plan, helps to assure effective use of people and resources to control and eliminate fire hazards in the workplace and to respond effectively to a fire emergency. This will reduce the incidence of fire, protect life safety and reduce the impact of fire should one occur.

# The procedures outlined in this Plan will be conducted with all due regard for personal safety

It is not the intent of this Plan to place a person in a hazardous situation that they are not trained or properly equipped for.

Many parties will have a role to play in promoting fire safety in the workplace. Each party will be responsible for certain administrative functions to be performed throughout the year. Some may be responsible for ensuring that tasks are carried out, while others may be responsible for carrying out those tasks.

# 5.1 Building Owner and Management (President, VP Finance & Administration)

The Ontario Fire Code defines "owner" as "any person, firm, or corporation having control over the property under consideration". Article 1.2.1.1 of the Ontario Fire Code states, "Unless otherwise specified, the Building owner is responsible for carrying out the provisions of this Code". Therefore, owners must take responsibility for ensuring compliance with the Ontario Fire Code.

The building owner / occupant have numerous responsibilities related to fire safety and must ensure that the following measures are enacted:

- Comply with the Ontario Fire Code.
- Ensure the Fire Safety Plan is developed, approved and fully implemented.
- Keep a copy of the approved Fire Safety Plan on the premises in an approved location.
- Review the Fire Safety Plan annually and revise when changes occur that will affect the information therein, such as contact information or changes to the fire protection system.
- Notification of the Chief Fire Official regarding changes in the Fire Safety Plan.
- Establishment of emergency procedures to be followed at the time of an emergency.
- Post and maintain at least one (1) copy of the fire emergency procedures.
- Appointment and organization of designated supervisory staff (Managers, Maintenance staff, Security or Fire Wardens) to carry out fire safety duties.
- Instruction of supervisory staff and other occupants so that they are aware of their responsibilities for fire safety.

- Designate and train sufficient alternates to replace supervisory staff during any absence
  - "Supervisory staff shall be instructed in the fire emergency procedures as described in the fire safety plan before they are given any responsibility for fire safety", as outlined in Section 2.8.1.2. (1) of the Ontario Fire Code.
  - It is not necessary that the supervisory staff be in the building on a continuous basis, but they shall be available on the notification of a fire emergency, to fulfill their obligations as described in the <u>Fire Testing Lab</u> Fire Safety Plan.
- Hold drills in accordance with the Ontario Fire Code and in consultation with the Chief Fire
  Official, incorporating Emergency Procedures appropriate to <u>Fire Testing Lab.</u>
- Keep adequate records of training and fire drills for a period of at least one-year.
- Ensure that hazards are identified and eliminated or controlled.
- Maintenance of building facilities and ensure that building life safety and fire protection systems provided for occupant safety are maintained.
- Provisions of alternate measures for safety of occupants during shut down of fire protection equipment.
- Assuring that checks, test and inspections as required by the Ontario Fire Code are completed
  on schedule and that records are retained for a minimum period of two (2) years.

## **5.2 Supervisor**

Employers are responsible for fire safety within their area of operation. Supervisors must:

- Comply with the Ontario Fire Code within the space you control or lease.
- Ensure that staff have been designated and trained to carry out the duties assigned to them under this Plan.
- Identify key personnel in your department requiring fire extinguisher training. To arrange training contact the Office of Human Resources Health & Safety (343-8806).
- Review the fire emergency procedures outlined in this Plan with your employees.
- Ensure any person who requires assistance to evacuate the building is identified and that a specific plan is established in the event of an emergency.
- Practice and encourage employees to participate in fire drills conducted in the building.
- Encourage employees to cooperate with Security staff as they provide direction during fire alarms and building evacuations.
- Respond to any requests to eliminate fire hazards.
  - o Eliminate those departmental fire hazards which you can control.
  - Report any fire hazards that you cannot control to Security Services or Physical Plant.
- Assist in evacuation procedures

#### i. Emergency Procedures - Supervisors

#### On notification of a Fire Emergency, Supervisors will:

- 1. Evacuate the area nearest the fire first, if known. Direct people to the nearest exit. If the exit is impassable, direct people to an alternate route.
- 2. If safe to do so, make a sweep of the area, checking all open rooms, including washrooms and storage rooms to ensure everyone has left.
- 3. Close but do not lock doors,
- 4. Note the name and/or location of any individuals who remain in the building to report to the Fire Department or Security Services staff.
- 5. Ensure persons who require assistance to evacuate or those who cannot evacuate are assisted. See section 5.6 for more detail.
- 6. Once the building has been evacuated, leave the building using the closest exit.
- 7. Once outside the building, direct evacuees to the designated meeting location (Parking lot, well away from the building) or in cases of inclement weather, to an adjacent building and ensure Security Services is notified of your alternate location.
- 8. Immediately notify the Fire Department personnel or Security Services staff of the location and/or name of any individuals who remained in the building and disclose any other information regarding the location or nature of the fire.
- 9. If Fire Department personnel are not on the scene, confirm with Security Services that the Fire Department has been notified.
- 10. Assist the Fire Department personnel and Security Services staff, as requested.
- 11. Obtain information from evacuees in your area. If anyone has information for the Fire Department or Security Services staff, ensure that it is reported.
- 12. The end of the Fire Alarm signal DOES NOT indicate that it is safe to re-enter the building. Ensure that no one re-enters the building until the all clear signal has been given by Security Services staff or Fire Department personnel.
- 13. After the fire emergency or fire drill is over, report any problems encountered during the evacuation to the Office of Human Resources- Health & Safety at 343-8806.

# Supervisors will execute their duties with all due regard for their own personal safety

# **5.3 Evacuation Meeting Locations**

The designated evacuation meeting location for *Fire Testing Lab* is the east end of the parking lot.

All persons evacuating the <u>Fire Testing Lab</u> must immediately report to the designated location and their Supervisor.

## 5.4 Physical Plant (Mechanical & Electrical Staff)

- Be familiar with the floor area, exits, the locations of any fire safety equipment and the sound of the building's carbon monoxide alarm.
- Be familiar with the operation of all fire protection and life safety systems and equipment.
- Provide specific checks, tests, and inspection requirements of the Ontario Fire Code assigned to you, as summarized in Chapter 11 of this Plan.
- Notify the appropriate persons of any planned or unplanned shutdown of fire protection or life safety equipment.
- Assist in implementing alternate measures for fire safety to compensate for the inactive system, as outlined in the Chapter 9 of this Plan.
- Restore the fire protection and fire alarm systems to normal operation after repairs or maintenance are completed or as soon as you are authorized to do so after an emergency.
- Assist in fire prevention by controlling fire hazards and conditions of possible safety threats.
- Promptly address and correct any fire hazards reported to you.
- Physical Plant will be notified by Security of any fire drills taking place.

#### i. Emergency Procedures -Physical Plant Staff

Upon notification by Security Services that a fire alarm has been activated, Physical Plant staff will stand by for further instructions.

#### **Electrical Staff will:**

- Be notified of all fire alarms and attend the site of any actual fire emergencies.
- Prepare to disconnect the electrical service to the affected area. Disconnection will be at the direction of the Fire Department.
- Request assistance of other Physical Plant Departments as needed.

## **5.5 Security**

- Be familiar with the floor area, exits, the locations of any fire safety equipment and the sound of the building's fire alarm.
- Participate in fire drills as described in this Plan.
- Assist in fire prevention by controlling fire hazards and conditions of possible safety threats.
- Promptly report or correct any fire hazards you have been informed of.
- Provide specific checks, tests, and inspection requirements of the Ontario Fire Code assigned to you, as summarized in the Chapter 11 of this Plan.
- Notify the appropriate persons of any planned or unplanned shutdown of fire protection or life safety equipment.
- Assist in implementing alternate measures for fire safety to compensate for the inactive system, as outlined in Chapter 9 of this Plan.

- Be familiar with the procedures and operation of the Fire Alarm and Security Systems.
- Be familiar with your role upon notification of a fire alarm.
- Know where the Fire Plan is kept and how to access the buildings material safety data sheets.
- Security must have quick access to fire safety equipment (Fire Alarm Panel, generator room, pull station keys, and service/fire access roads).
- Be available to assist the Fire Department.

### As with any emergency Fire Alarms will take priority over any other university business

#### i. Emergency Procedures- Security Services

#### Upon receiving notification of a fire, Security will:

- 1. Confirm the exact location of the fire.
- 2. Call 9-11.
- 3. Over the radio, notify the security personnel and dispatch all patrol officers to the appropriate building.
- 4. Await further instructions from the Security Officers on the scene. Upon receipt of a report from the Security Officer on scene, the Security will:
  - a. Contact Fire Dispatch (684-1525) to provide specific information regarding the alarm.
  - b. Contact Physical Plant and Electrical staff (343-8273) if there is a known fire.
- 5. Alert Human Resources at 343-8806 or 343-8671 or after hours using the Emergency Contact phone numbers filed with Security.
- 6. Any information received on the cause of the alarm will be relayed immediately to the Security Officers on scene.

#### Upon notification of a fire, Security Officers assigned to patrol will:

- 1. ONE officer will meet the Fire Department at the designated entrance.
- 2. Advise the Fire Department of any information regarding the cause of the fire or details of the fire and relay any concerns regarding the zone affected.
- 3. ALL OTHER officers will immediately report to the area in distress and report to the other security personnel the condition of the site.
  - One officer will check the area in distress, if it is safe to do so. Report findings to the security office and indicate if there is a need for other services to be called (i.e. Ambulance, Electrical, or Mechanical). The officer will also report if there is an actual fire, smoke present or if the cause of the fire is known.
  - b. Ensure fire access routes are unobstructed (Remove any bollards and open gates).
  - c. One officer will control crowds and ensure that all persons are kept away from the building and the roadway is clear for the Fire Department. Ensure no one re-enters the building until the Fire Department has given the all clear.
- 4. Security officers will follow the instructions of the Fire Department personnel.

- 5. Once authorized by the Fire Department, Security Officers will provide the "All Clear" announcement to those who have evacuated the building.
- 6. Security will facilitate the Fire Department's investigation (if a fire occurred).
- 7. An incident report must be generated for ALL fire alarms, without exception.
- 8. Forward a copy of the report to the Office of Human Resources Health & Safety.

Security Officers shall refer to a more detailed description of these procedures in the "Security Services Department Policy & Procedure Manual".

## **5.6 Persons Requiring Assistance to Evacuate**

Persons requiring assistance to evacuate are encouraged to identify themselves to their Supervisor or to their Instructors upon entering Fire Testing Lab. It is the responsibility of Lakehead University to ensure that persons requiring assistance to evacuate are provided with means to leave the premises safely. Supervisors should be aware if there are individuals in their classes or department who require assistance in the event of a fire emergency.

For those persons who are unable to evacuate, Supervisors must know:

- Where a person can be safely left in the eventuality that evacuation from the building is not possible.
- The procedure for reporting the location of persons left in the building to the Fire Department or Security Services.

Immediately inside the exit vestibule is the best location to await rescue, in the event that evacuation is not possible. Exits are protected with fire resistant walls and doors designed to protect from smoke and fire. Be familiar with the evacuation plan.

## i. Emergency Procedures- Persons Requiring Assistance to Evacuate

On notification of a Fire, a Supervisor who is aware that a person with requiring assistance to evacuate is present in their workplace or classroom will:

- 1. Ensure that the individual has been notified.
- 2. Carry out your regular duties: instruct all occupants to evacuate via the nearest exit, conduct a systematic check of the immediate area and turn off all equipment if safe to do so.
- 3. If the individual requiring assistance to evacuate has not made alternate plans for evacuation, the following procedure will be followed:
  - a. The Supervisor will help any person requiring assistance in reaching a safe location outside the building using an exit, insofar as they are able to do so.
    - i. Persons requiring assistance should be moved into the exit when there is a break in the flow of persons evacuating, or when the vestibule is clear.
    - ii. If the person is unable to continue, stop at the next door encountered. Do not obstruct others who are evacuating.

- iii. Station the person immediately inside the vestibule, if safe to do so, call Security (343-8911) or exit the building and immediately inform Security Services or the Fire Department of the person's location.
- b. To assist individuals who are unable to evacuate, the Supervisor, will ensure the person requiring assistance is moved to the nearest exit vestibule.
  - i. Persons who cannot exit the building are to remain inside the exit vestibule, ensuring that the exit door remains closed.
  - ii. Any person who wishes to stay with the individual may do so.
  - iii. Contact Security (343-8911). If a phone is not available exit the building and immediately inform Security Services or the Fire Department of the person's location.

# Those who have begun providing support must ensure the person requiring assistance has been safely evacuated before resuming their regular duties

# **5.7 All Occupants**

All occupants must be familiar with Lakehead University Emergency Procedures to be followed upon discovery of smoke or fire and upon hearing the fire alarm. Occupants will also participate in all fire drills and other fire safety training prescribed by Lakehead University.

#### Refer to the Emergency Procedures Flipbook posted throughout the building for a quick reference.

Notify your Supervisor if you have a condition that you feel may inhibit your ability to evacuate the building safety without assistance. If you are assigned to assist someone to evacuate, ensure that you know the procedures to be carried out. Make note and report any fire hazards or unsafe conditions observed in the building. Refer to Chapter 7 for more details.

#### i. Emergency Procedures- All Occupants

#### Upon Discovery of Fire or Smoke

- 1. Leave the fire area immediately. Remove any person in immediate danger. Ensure that all doors to the affected area are closed to confine the fire. Do not lock.
- 2. Warn people in the area to evacuate.
- 3. Leave the building using the closest exit stair, closing doors and open windows behind you.
- 4. Once at a safe location call 343-8911 or extension 8911 from a campus phone.
- 5. Follow instructions provided by your Supervisor, Security staff and the Fire Department.
- 6. Report to Security staff or the Fire Department if you know of anyone still in the building.
- 7. Move away from the building and congregate in the designated meeting location (Parking lot).
- 8. Do not return to the building until authorized to do so by the Fire Department or Security.

#### On Notification of a Fire

- 1. Evacuate the building immediately using the nearest exit.
- 2. Leave the building using the closest exit, closing doors and open windows behind you.

- 3. Follow instructions provided by your Supervisor, Security staff and the Fire Department.
- 4. Report to Security staff or the Fire Department if you know of anyone still in the building, or if you saw smoke or fire.
- 5. Move away from the building and congregate in the designated meeting location (Parking lot).
- 6. Do not return to the building until authorized to do so by the Fire Department or Security.

## 5.8 Extra Precautions While Exiting

- 1. Check all doors before opening them using the back of your hand.
  - a. If the door is hot, do not open it. Use an alternate path to exit.
  - b. If the door is not hot, brace yourself against it and open it slightly, standing to one side. If you detect fire or smoke, feel air pressure or a hot draft, close the door quickly, leaving it unlocked. Use an alternate path to exit.
- 2. If an exit route is not available or you are trapped:
  - a. Return to a "safe room" (i.e. an office) and close the door, leaving it unlocked.
  - b. Seal off all openings which may admit smoke.
  - c. Crouch low to the floor if smoke enters the room.
  - d. Call Security at 343-8911 or extension 8911 and alert them to your location. Wait to be rescued.
  - e. If a phone is not available get the attention of emergency personnel by any means available to you (shout, wave from a window, etc.).
  - f. Listen for instructions given by authorized personnel.
- 3. If you encounter smoke while exiting and an alternate exit or a "safe room" is not available, drop to your knees and crawl towards the closest exit.

## **5.9 Special Evacuation Procedures**

#### i. Contractors & Cleaning Staff

- 1. As long as it is safe to do so, turn off any equipment you are using and ensure that it is not left in such a way as to block exits.
- 2. Evacuate the building using the nearest exit stair. Do not use the elevator.
- 3. Follow the directions of Fire Wardens, Security staff and the Fire Department.
- 4. Ensure that the building staff are aware that you have evacuated
- 5. Move away from the building and congregate in the designated meeting location (Parking lot).
- 6. Do not return to the building until authorized to do so by the Fire Department or Security services.

## **5.10 Hazardous Materials Emergencies**

No additional hazardous materials are handled or stored in this location.

# **Chapter 6: Fire Extinguishment, Control or Confinement**

In the event of a small fire, first ensure that the Fire has been reported by dialing extension 8911(343-8911) to ensure that the Security Office have been notified prior to any attempt to extinguish a fire. Security officers will report to Emergency dispatch (911) any specifics details concerning the location and nature of the fire.

# Fighting a fire is always a voluntary act

Only those persons who are trained and familiar with extinguisher operation may attempt to fight a fire. In the event a small fire cannot be extinguished with the use of a portable fire extinguisher or the smoke presents a hazard for the operator, the door to the area should be closed to confine and contain the fire. Leave the area.

## 6.1 Suggested Operation of Portable Fire Extinguishers

Remember the acronym **P.A.S.S.** 

**P**ull the safety pin

**A**im the nozzle

**S**queeze the trigger handle

**S**weep from side to side (watch for fire restarting)

Never re-hang extinguishers after use. Contact Security Services (343-8569) to ensure that they are properly recharged by qualified personnel. Security services will also ensure that a replacement extinguisher is provided.

Keep extinguishers in a visible area without obstructions around them.

#### 6.2 Classification of Fires

Fires are classified according to the fuel type involved.

Class "A" fires are those fuelled by combustible solids, such as wood, paper, excelsior, rags and rubbish.

Class "B" fires occur in the vapour-air mixture over the surface of flammable liquids, such as gasoline, oil, grease, paints and thinners.

Class "C" fires occur in or near live electrical equipment.

Class "D" fires occur with pyrophoric (combustible) metals such as magnesium, titanium, lithium, sodium, potassium, etc.

Class "K" fires involve cooking oils or fats, such as those found in a deep fryer.

## **6.3 Classification of Fire Extinguishers**

Portable fire extinguishers are classified according to their ability to handle specific classes of fires. Labels on the extinguisher indicate the class or classes of fire that they can be expected to extinguish.



Extinguishers suitable for class "A" fires are identified by a triangle containing the letter "A"



Extinguishers suitable for class "B" fires are identified by a square containing the letter "B"



Extinguishers suitable for class "C" fires are identified by a circle containing the letter "C"



Extinguishers suitable for class "D" fires are identified by a star containing the letter "D"



Extinguishers suitable for class "K" fires are identified by a hexagon containing the letter "K". Class K extinguishers must ONLY be used on cooking fires (i.e. The deep fryer)

In Fire Testing Lab class "AB" and "ABC" extinguishers are provided.

# **Chapter 7: Fire Hazards and Fire Prevention**

# Fire Prevention is everyone's responsibility

If you notice a potential fire hazard report it to your supervisor or Health & Safety (343-8806) immediately. Every precaution shall be taken to minimize accidents and prevent injuries.

# 7.1 Housekeeping

- Maintain safe escape routes by keeping exits, stairwells, hallways, windows, aisles and corridors free from obstructions and combustible materials.
- Ensure both sides of a door are kept free and clear of debris.

- Tables, equipment and other materials and installations may be placed in corridors only with the approval of the Fire Department. For further information contact Health & Safety at 343-8806 or Physical Plant at 343-8273.
- Regularly clear out combustible materials, such as waste paper and cardboard boxes. Review dead files and dispose of waste material.
- Emergency exits are marked by the lighted "EXIT" signs. Report any burnt out exit lights to Physical Plant at 343-8273 or to Security 343-8569 after hours.

#### 7.2 General Hazards

- Do not use open candles or open flames.
- Smoking is prohibited on university property, except in designated smoking area.
- Place posters or decorations on bulletin boards. Never leave anything flammable in the corridors, stairwell or any means of egress.
- Do not hang decorating material from ceilings and keep streamers and banners to a minimum.
- Avoid placing combustible materials directly in contact with an electrical outlet.
- Ensure proper disposal of oily rags.

#### 7.3 Electrical Hazards

- All electrical equipment, electrical lights used for decorations and extension cords must be CSA or ULC approved. Accepted certification marks can be review on Lakehead University's Health & Safety website. <a href="https://www.lakeheadu.ca/faculty-and-staff/departments/services/hr/health-safety/tb/emergencies/fire-safety">https://www.lakeheadu.ca/faculty-and-staff/departments/services/hr/health-safety/tb/emergencies/fire-safety</a>
- Electrical wiring that is defective, frayed or cracked must be replaced. Discontinue use and contact physical plant (343-8273) immediately upon discovery of damaged electrical wiring.
- Outlets and electrical devices that show evidence of electrical arching will mean discontinuation of use until a qualified electrician from Physical Plant can assess the problem.
- If a circuit breaker consistently "trips", discontinue using the device that is causing the circuit to trip. Contact a licensed electrician from Physical Plant to assess the electrical system.
- All electrical work must be done by a licensed electrician with Physical Plant (343-8273).
- Circuit breaker panels shall not be covered or obstructed by stored material. 1 meter clearance is required.
- Electrical equipment located where flammable or combustible liquids are present shall conform to the Electrical Safety Code made under the Electricity Act, 1998.

# In Ontario it is ILLEGAL to connect unapproved equipment to an electrical supply

#### 7.4 Extension Cords

- Extension cords are designed for temporary use only. Never should they be used as permanent wiring.
- Assure that extension cords used are of the proper rating to accept the required electrical load.

- Protect extension cords from damage and do not run them under mats or carpets. For long term use, extension cords must be replaced with a power bar or installed permanent wiring.
- Power bars are acceptable for long term use, provided they are used safely. Review safe use of power bars on Lakehead University's Health & Safety website.
   <a href="http://hr.lakeheadu.ca/wp/?pg=140">http://hr.lakeheadu.ca/wp/?pg=140</a>

## 7.5 Space Heaters and Appliances

- Space heaters are to be used with care, at least 1 meter away from combustible materials and must NEVER be left unattended.
- Seasonal trees must be flame retardant and ULC certified.
- Turn off or unplug any appliances or decorative lights before you leave.
- All electrical appliances with heating elements (kettles, coffee makers, space heaters) must have an automatic shut-off function.

## 7.6 Storage Areas

- Storage areas must be kept clean, organized and free of debris.
- Stacked material must be arranged so that the piles are stable and not at risk of tipping over.
- Light fixtures should be protected by wire guard or cage to prevent damage of light bulbs.
- Material should not be stored directly touching an electrical outlet.
- Electrical equipment and devices should not be operated, or connected to an electrical source in storage rooms.
- Doors to storage rooms shall be kept closed at all times.
- Service rooms should not be used for storage.
- Combustible material will be stored only in approved areas (see Section 7.8)
- Flammable and combustible liquids, hazardous, reactive, or unstable chemicals shall not be stored in rooms used for ordinary combustible materials (i.e. Paper or cardboard boxes).

# 7.7 Flammable and Combustible Liquids

No flammable or combustible liquids are in use or stored at this location.

# 7.8 Safety Storage of Compatible Chemicals

Hazardous chemicals are not stored or used at this location.

## 7.9 Compressed Gas

Compressed gases are not stored or handled at this location.

#### 7.10 Hot Works

Hot works, such as welding, will be conducted by approved staff only following approved procedures. Contact Physical Plant at 343-8273 for more information or to request a permit for hot work.

# **Chapter 8: Fire Protection Measures**

#### 8.1 Carbon Monoxide Detectors

The <u>Fire Testing Lab</u> is equipped with carbon monoxide detectors. The detector has an audible and a visual alarm.

## 8.2 Fire Extinguishers

<u>Fire Testing Lab</u> is equipped with fire extinguishers. The extinguishers are either wall mounted, or located in the fire hose cabinets in the hallways. Extinguishers are checked monthly. If you discharge an extinguisher, or find one that has been discharged, contact Security at 343-8569 and request a replacement.

#### 8.3 Fire Routes

Fire routes are areas of access for responding Fire Professionals. Obey the signs posted and park only in designated parking spots.

## 8.4 Emergency Lighting

<u>Fire testing lab</u> is equipped with emergency lighting. Emergency lighting provides illumination to exits, corridors and principle exit routes in the event of the loss of primary power.

# **Chapter 9: Alternative Measures for Fire Safety**

In the event of any shut down of fire protection equipment systems (either entirely or partially), alternate measures for fire safety must be taken. For any shut down of fire protection equipment in excess of 24 hours, the Fire Department shall be notified in writing.

Occupants will be notified of the areas affected by the shutdown and instructions for alternate fire safety measures or actions will be posted as to alternative provisions or actions to be taken in case of emergency. These provisions and actions must be acceptable to the Chief Fire Official.

# 9.1 Carbon Monoxide Monitoring Detector

Controlled burns will not be initiated if the detector is not functioning.

#### 9.2 Exits

Exits shall not be obstructed. In the event that planned construction or maintenance will cause an exit to become unusable, the following emergency procedures will be employed:

- Ensure the planned construction or maintenance is in compliance with municipal building permits.
- Ensure alternative measures are developed to compensate for the blocked exits.
- Post temporary exit signs to clearly identify the alternate exits.
- If necessary, create emergency evacuation procedures.

Physical Plant will alert the building occupants to obstructed exits via a communication bulletin.

## 9.4 Fire Extinguishers

It is the responsibility of Security Services to provide a temporary fire extinguisher (of equal type and rating) when a fire extinguisher has been removed for servicing.

# **Chapter 10: Fire Drills**

Fire drills are regularly conducted to ensure that all building occupants are familiar with fire evacuation procedures. Fire drills assist Security Services and Human Resources staff in revising and refining fire emergency procedures. The <u>Fire Testing Lab</u> building will have scheduled fire drills once a year and fire drill records are required to be retained for a period of one year.

# All occupants of a building must evacuate immediately during a fire drill

Building occupants should report any observations made during the evacuation to their Supervisor. Supervisors will report any problems encountered during the evacuation drill to Health & Safety by calling 343-8806.

# Chapter 11: Maintenance Schedule as Required by the Ontario Fire Code

The following is a list of the portions of the Fire Code that require checks, inspections, and/or tests to be conducted of the facilities. Permanent records of all tests and corrective measures taken are required to be retained for a period of two years after they are made. If the time interval between tests exceeds two years, then the records shall be retained for the period of the test interval plus one year.

Records are to be made available upon the request of the Chief Fire Official or Fire Prevention Officers.

This list has been prepared for convenience only. For accurate reference, the fire code and referenced standards should be consulted.

Definitions of key terms include:

**Check:** means visual observation to ensure the device or system is in place and is not obviously damaged or obstructed.

**Test:** means the operation of a device or system to ensure that it will perform in accordance with its intended operation or function.

**Inspect**: means physical examination to determine that the device or system will apparently perform in accordance with its intended function.

## 11.1 Daily Tasks

Each time the furnace is to be used, carbon monoxide detector function will be verified.

# 11.2 Monthly Tasks

| Responsibility | Task                | Description   | Fire Code<br>Reference   |
|----------------|---------------------|---|--------------------------|
| Security       | Inspect             | Portable fire extinguishers and record electronically or on the attached tag. | 6.2.7.2.                 |
| Contractor     | Inspect and<br>Test | Emergency lighting, voice paging and emergency telephones.                    | 6.3.2.2.<br>CAN/ULC-S536 |

## 11.3 Annual Tasks

| Responsibility  | Task     | Description   | Fire Code<br>Reference |
|-----------------|----------|---|------------------------|
| Maintenance     | Operate  | Disconnect switch for mechanical air-<br>condition and ventilation systems.                                 | 2.6.1.8.               |
| Health & Safety | Review   | Fire safety plan as often as necessary but at intervals not greater than 12 months.                         | 2.8.2.1.(4)            |
| Contractor      | Maintain | Fire extinguishers (mechanical parts, extinguishing agent, and expelling means will be thoroughly examined) | 6.2.7.1. NFPA 10       |

# 11.4 Tasks Every Five (5) Years

| Responsibility | Task | Description  | Fire Code<br>Reference |
|----------------|------|--|------------------------|
| Contractor     | Test | H2O, CO2 and dry chemical (stainless steel shell) extinguishers, hydrostatically tested. | 6.2.7.1. NFPA 10       |

# 11.5 Tasks Every Six (6) Years

| Responsibility | Task     | Description   | Fire Code        |
|----------------|----------|---|------------------|
|                |          |   | Reference        |
| Contractor     | Maintain | Stored-pressure fire extinguishers that require a 12-year hydrostatic test by emptying and subjecting to the applicable maintenance procedures. | 6.2.7.1. NFPA 10 |

# 11.6 Tasks Every Twelve (12) Years

| Responsibility | Task | Description  | Fire Code<br>Reference |
|----------------|------|--|------------------------|
| Contractor     | Test | Extinguishers with milled steel shells hydrostatically tested. | 6.2.7.1. NFPA 10       |

# 11.7 Tasks, As Required

| Responsibility  | Task     | Description                                    | Fire Code   |
|-----------------|----------|--|-------------|
|                 |          |  | Reference   |
| Security        | Maintain | Access for firefighting free of obstructions.  | 2.5.1.2.(1) |
| Security        | Maintain | Fire access routes to be immediately ready for | 2.5.1.3.    |
|                 |          | fire department vehicles.                      |             |
| Health & Safety | Review   | Fire safety plan as often as necessary but at  | 2.8.2.1.(4) |
|                 |          | intervals not greater than 12 months.          |             |