



UNIVERSITY OF  
**NORTHERN COLORADO**

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**Environmental Health and Safety**

# **FIRE PREVENTION GUIDELINES & PRACTICES**

**March 2024**



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**NORTHERN COLORADO**

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**Environmental Health and Safety**

**Fire Prevention Guidelines & Practices  
Table of Contents**

- I. Purpose
  - II. Responsibilities
  - III. Inspections
  - IV. Fire Permits
  - V. Occupancy Load
  - VI. Fire Drills
  - VII. General Fire Safety Guidelines
    - A. Cooking Safety
    - B. Open Burning
    - C. Portable Fire Pit – Wood Burning (Portable Outdoor Fireplace)
    - D. Portable Fire Pit – LP (propane) Gas
    - E. Pyrotechnics
    - F. Electrical Safety
    - G. Storage
    - H. Corridors, Egress Routes, Exit Doors
    - I. Fire / Smoke Rated Doors
    - J. Fire Detection and Alarm Systems
    - K. Parking, Fire Lanes, and Emergency Access
    - L. Decorations
    - M. Appliances and Electrical Fixtures
    - N. Food Trucks / Trailers
    - O. Fog Machines
  - VIII. Fire Extinguishers
  - IX. Fire Suppression Systems
  - X. Event Management – Fire and Safety
  - XI. Contractors
  - XII. Training
- Appendices
- A. Fire / Safety Drill Report



## **Fire Prevention Guidelines and Practices**

### **I. Purpose**

The University of Northern Colorado (UNC) Fire Prevention Guideline and Practices (FPGP) program is primarily a reiteration of existing national, state, and local standards and laws. The Greeley Fire Department (GFD) is recognized as the Authority Having Jurisdiction (AHJ) in matters related to fire safety. UNC Environmental Health & Safety (EHS) oversees all fire safety matters on campus. The National Fire Protection Association (NFPA), International Fire Code (IFC), and International Building Code (IBC) are the primary resources used in the development of this program.

These guidelines include methods designed to protect faculty, staff, students, visitors, and contractors from fire and safety hazards presented by diverse operations conducted at the university and to promote safe practices. It is also designed to protect the property and assets of the University. This plan is to simplify and address the most common fire and safety compliance issues in the above-mentioned codes and standards.

### **II. Responsibilities**

Environmental Health & Safety – EHS is responsible for promoting regulatory compliance which may include the development, coordination, and implementation of safety programs. EHS is responsible for assisting all UNC affiliates in the review of safety hazards and concerns.

Deans, Directors, and Chairs – Responsible for implementing safety programs in areas under their control, providing assistance to EHS or GFD in correcting hazards and concerns, and implementing fire prevention and evacuation procedures.

Managers and Supervisors – Responsible for ensuring that their areas of responsibility are compliant with approved fire safety practices, receive essential training, and coordinate code violation corrections with EHS.

Maintenance Personnel – Responsible for ensuring the proper maintenance, operation, and documentation of all emergency and safety devices under their control.

Faculty, Staff, and Students – Shall become aware of and comply with fire safety programs, attend trainings, and report any suspected fire safety hazard to EHS.

Students – Students are urged to become familiar with the safety procedures of UNC and should report any potential fire safety hazard to University Police (UNCPD).

Contractors – Are responsible for compliance with local, state, and federal safety standards.

Contractors have the responsibility to ensure that their work does not create fire or other safety hazards.

### **III. Inspections**

Environmental Health & Safety and the Greeley Fire Department conduct regularly scheduled inspections of campus facilities. These inspections will be scheduled between EHS and the Building Coordinator. At times, unannounced inspections of facilities are conducted by EHS. At the beginning of each semester, Housing & Residential Education conducts a Health & Safety inspection of each resident's room.

Every fire inspection, follow-up inspection, fire drill, system test, or incident investigation conducted will generate a report. The report will be sent to the appropriate department representative and a hard copy will be maintained in the Facilities Management (FM) or EHS office. Some occupants and FM are responsible for ensuring all code and safety issues are identified as their responsibility and are addressed appropriately and corrected.

### **IV. Fire Permits**

Permits may be required by EHS, GFD, and/or UNCPD for the following:

- Special Events
- Fireworks or Pyrotechnics
- Open flames or open burning (including candles)
- Tents and canopies (larger than 100 sf – 10' x 10')
- Fire impairment of fire systems
- Any condition, operation, or use of materials considered being hazardous, dangerous, or unsafe

EHS shall be notified a minimum of two weeks in advance, to inform the event coordinator of the process for acquiring a permit from GFD (if required). The Event Organizer shall submit a Fire / Police / Safety (FPS) Event Request form. All requests will be reviewed for safety and fire code compliance. Additional event guidance can be found in the Events Fire and Safety Procedure.

### **V. Occupancy Load**

Occupant loads of a building, an area, or a portion of a building are established and enforced to ensure accessibility to accommodate safe egress from a building, an area,

or a portion of a building. An occupant load is determined after establishing the occupancy use and after reviewing the contents, area, and use of the facility.

For most assembly areas on campus, the occupancy load of the area is established by the number of fixed seats. It is the responsibility of each department, organization, or group to ensure that minimum egress requirements are enforced.

## **VI. Fire Drills**

Environmental Health & Safety conducts fire drills, in residence halls, once per semester, following Life Safety Codes. A fire drill is designed to prepare residents and staff for an actual incident and to evaluate resident and staff performance and readiness. Fire drills are not announced in advance to residents/occupants.

Fire drills can be conducted in non-resident (academic, health center, recreation center, etc.) facilities upon request. A Fire / Drill Safety Report (Appendix A) will be completed for each fire drill conducted and the report will be sent to the appropriate individuals.

## **VII. General Fire Safety Guidelines**

The following requirements are the minimum acceptable practices for UNC. Occasions may arise where more stringent standards may be imposed. Exceptions must be approved by EHS and/or GFD. Fire safety is a matter of common sense, education, and training. By following the guidelines and requirements of this program, we can minimize many situations that cause fire and safety hazards.

### **A. Cooking Safety**

Where cooking is permitted, the following safety procedures shall be followed:

#### **Residential Electric/Gas Stoves**

- Stoves/ovens must have electric or gas connections installed and maintained by a qualified individual.
- Stoves and ovens, when installed, should have a grease filter over the stove. Where a grease filter is not installed, cooking will be limited to foods that will not produce grease-laden vapors.
- Combustible materials, such as potholders, paper towels, etc., should be kept at least 18" from the stovetop and any burners.
- A fire extinguisher shall be installed in or near the kitchen area.
- When cooking, the stove must not be left unattended for any length of time. If it is necessary to leave the room unoccupied, the stove must be turned off.
- Do not use matches to light gas stoves equipped with electric starters. If the starter does not operate correctly, the unit must be repaired or replaced.
- Check all burners on the stove before leaving to ensure that all units are off.

### Barbecue Grills (gas and charcoal)

- Barbecue grills are not permitted for use inside buildings, under balconies or building protrusions, or inside or underneath tents/canopies
- Fire Extinguisher are required within the grilling area
- Keep combustible materials at least 15 feet away from the grill
- Grilling shall be a minimum of 25 feet away from air intake vents, doors, or other similar avenues for smoke to enter a building
- Barbecue grills will not be used within 10 feet of a building/structure
- All gas lines, valves, and connections on gas grills shall be periodically checked to detect leakage. If a leak is detected, the grill will be taken out of service until repaired.
- Used charcoal must be left in the grill until cold to the touch or thoroughly soaked in water in a metal container.
- When using a charcoal grill, flammable charcoal lighter fluid may be used before lighting. Do not add lighter fluid after the charcoal is lit. If more charcoal is required, add pre-soaked coals.
- Grills should not be left unattended for any length of time (even during the cooling phase)
- Grills must be completely cooled off before storing inside a facility
- Do not use a grill within 50 feet of flammable storage areas

### Electrical Grills

- Electrical grills are not permitted for use inside a building, under balconies or building protrusions, or inside or underneath tents/canopies.
- Fire Extinguisher are required within the grilling area
- Keep combustible materials at least 15 feet away from the grill
- Grilling shall be a minimum of 25 feet away from air intake vents, doors, or other similar avenues for smoke to enter a building
- Grilling should be at least 10 feet away from a building/structure
- Grills should not be left unattended for any length of time (even during the cooling phase)
- No fuel or matches shall be used
- Grills must be completely cooled off before storing inside a facility
- Grills should be cleaned after each use
- Electrical cords shall be in good condition and inspected before each use
- Do not use a grill within 50 feet of flammable storage areas
- Manufacturer recommendations shall be followed

### Commercial Cooking

- FM manages the installation, testing, and inspection of equipment.
- All cooking equipment shall be installed, tested, and inspected in accordance with NFPA standards.
- All commercial cooking equipment in which grease-laden vapors are produced will have an automatic dry, wet chemical, or equivalent system installed. Portable fire extinguishers must also be installed in or near the kitchen area.

- Equipment, hood, and grease filters must be cleaned frequently. Each hood and the dry chemical system must be inspected according to NFPA standards and frequencies checked by a qualified individual.

Residents in Housing and Residential Education facilities should also refer to the Housing and Residential Education Handbook for additional cooking rules and guidelines in residence facilities.

## B. Open Burning

Open burning is defined as the burning of materials wherein products of combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber (i.e. bonfires, campfires, leaf burning, artwork involving flames, pyrotechnics of any kind, etc.).

Approvals: Open burning on UNC property must acquire an approved fire permit from Greeley Fire Department (GFD) (See Section IV).

Open burning outdoors may be authorized under the following conditions:

- A request shall be submitted to EHS and GFD two (2) weeks in advance of the event or operation
- The location shall be approved by EHS and FM
- The proposed burning will not endanger any adjacent buildings, vehicles, or vegetation
- The burn location will not block access for emergency vehicles to any building, street, or emergency device
- Open flame fires will not be within 50 feet of any flammable storage area (the distance may be increased according to the size of the event), and a minimum of 25 feet of any building, vehicle, or vegetation
- Wind speed must be less than 15 MPH for any open burn. Fireworks may have stricter wind speed requirements (10 MPH).
- A Red Flag Warning has not been issued for the Greeley / UNC area
- Only natural, untreated wood is allowed for burning (unless approved by GFD or EHS)
- The event coordinator may be required to provide a fire watch and Event Manager.
- The event coordinator of the open burning may be responsible for the complete extinguishment and removal of all materials used in the open burning area, otherwise specified by GFD
- A 30-minute watch, after the event, will be required to ensure there is no residual heat left in the material

Note: Open Burning does not include road flares, smudge-pots, and similar devices associated with safety or occupational uses typically considered as open flames.

A person shall not throw or place, or cause to be thrown or placed, a lighted match, cigar, cigarette, matches, or other flaming or glowing substance or object on any surface or article where it can cause an unwanted fire.

#### C. Portable Fire Pit – Wood Burning (Portable Outdoor Fireplace)

Where a portable fire pit – wood burning is permitted, the following safety procedures shall be followed:

- Fuel package is limited to 3 feet in diameter and 2 feet in height
- Keep combustible materials at least 25 feet away from the fire pit
- Fire pit shall be a minimum of 25 feet away from air intake vents, doors, or other similar avenues for smoke to enter a building
- Fire pit shall be at least 25 feet away from a building, vehicle, or vegetation
- Fire pit shall not be left unattended for any length of time (even during the cooling phase)
- The fire pit location will not block access for emergency vehicles to any building, street, or emergency device
- Fire Extinguisher are required at the fire pit area
- Fire pit will not be within 50 feet of any flammable storage area
- Wind speed must be less than 10 MPH for any fire pit – wood burning.
- If a Red Flag Warning has been issued for the Greeley / UNC area, a wood-burning fire pit can NOT be used
- Portable fire pits must be placed on non-combustible materials
- Only burn clean dry wood
- A 30-minute watch, after the fire pit stops burning, will be required to ensure there is no residual heat left in the material
- It is recommended to place water on the fire when the burn is finished

#### D. Portable Fire Pit – LP (propane) Gas

Where a portable fire pit – LP (propane) gas is permitted, the following safety procedures shall be followed:

- Fire pit is limited to 3 feet in diameter
- Keep combustible materials at least 10 feet away from the fire pit
- Fire pit shall be a minimum of 25 feet away from air intake vents, doors, or other similar avenues for smoke to enter a building
- Fire pit shall be at least 10 feet away from a building, vehicle, or vegetation
- Fire pit shall not be left unattended for any length of time
- The fire pit location will not block access for emergency vehicles to any building, street, or emergency device
- Fire Extinguisher are required at the fire pit area
- Fire pit will not be within 25 feet of any flammable storage area
- Portable fire pits must be placed on non-combustible materials
- Ensure the grill/propane is properly stored after use

## E. Pyrotechnics

Pyrotechnics displays will be coordinated through EHS & GFD authorized under the following conditions:

- A written request is sent to GFD two (2) weeks in advance of the event
- The location shall be approved by EHS and FM
- The individual handling the pyrotechnics must be a licensed handler of the material to be used and shall be responsible for the proper storage, handling, transportation, use, and disposal of the materials, and must obtain a permit from GFD
- Wind speed must be less than 15 MPH with less than 20 MPH gusts
- The event coordinator must contact EHS and provide pyrotechnics information
- Further detailed requirements may be made available through coordination with EHS and GFD
- Pyrotechnics cannot cause disruption or damage on campus property

## F. Electrical Safety

Work on electrical wiring or electrical equipment is permitted only under the oversight of an FM-licensed electrician or approved licensed contractor. UNC personnel shall comply with the safe use guidelines of this program and the UNC Electrical Safety Guidelines program.

1. Extension cords will be permitted when used:
  - For temporary use only (90 days or less)
  - In one continuous length. Cords may not be connected, "piggybacked", spliced together; and/or
  - As temporary wiring for holiday displays, artwork, or vendors at special events and similar uses
2. Extension cords will not be permitted when used:
  - As permanent wiring
  - When the use will cause a tripping hazard for normal traffic or emergency evacuation
  - When fire barriers or fire-rated walls are breached to run the wiring unless the hole is properly fire-stopped and the wire properly enclosed in the appropriate conduit
  - When the cord shows signs of wear, defects, bulging, exposed wire, or other damage
  - In corrosive areas or near any substance that would deteriorate the cord
3. Electrical panels must:
  - Be unobstructed for 36" in front of and in all directions around the panel for access
  - Have the panel cover and panel door securely in place and closed
  - Be identifiable as an electrical panel.

## G. Storage

Storage does not constitute a fire hazard. The problem begins when items are stored in an improper manner, in a hazardous location, where other fire hazards are present, or where storage affects the safe evacuation of occupants.

1. General Storage - Any room or building used for the general storage of ordinary combustibles for temporary, long-term, or permanent storage.
  - Combustible materials will be separated from more hazardous materials such as flammables, corrosives, explosives, oxidizers, etc. EHS can assist with evaluations of locations.
  - Stored materials must be kept at least three (3) feet from any heat source. Aisles in any room used for storage shall maintain a minimum of two (2) feet width to allow for evacuation and for firefighters to gain access to the most remote area of the room.
  - Storage must not block fire extinguishers, fire alarm pull stations, emergency or exit lighting, fire strobe lights and horns, access to evacuation routes, the exit door, emergency equipment, or entry of emergency personnel.
  - Storage under stairwells serving as a component of the fire exit is not permitted.
  - Doors to storage rooms must remain closed except when entering or leaving the room.
  - Storage is prohibited in electrical rooms.
2. Flammable Storage – It is critical that flammables not only be used properly but also stored safely.
  - Flammables that are required to be stored away from combustibles must be stored in an approved flammable storage cabinet. This cabinet will be labeled and incorporate self-closing doors.
  - Ordinary combustibles must not be stored in flammable storage cabinets.
  - Oily or grease-laden rags must be kept in metal, self-closing containers.
  - Only metal flammable storage cabinets meeting NFPA standards will be used.
3. Hazardous Materials Storage – Hazardous products may produce a substantial amount of toxic vapors as well as react with a fire to create a fast-moving or explosive situation. The storage of such materials must be strictly controlled.
  - Hazardous materials will not be stored within 50 feet of any open flame or heat source.
  - Hazardous materials will be stored in separate cabinets or rooms according to their reactive properties.

## H. Corridors, Egress Routes, Exit Doors

In an emergency, one of the most important requirements is to ensure that all occupants can leave the building safely. To accommodate this, corridors, hallways, and exits are designed and constructed to allow people to leave the building in the safest and quickest way possible.

### 1. Obstructions:

- No corridor, aisle way, or component of a means of egress may be obstructed
- Furniture in lobbies must not obstruct the minimum width requirement of egress and must be arranged so there is a direct path to the exit. Furniture in an exit corridor must be approved by EHS and may require a fire-rated material
- Wires, cables, or extension cords may not be laid across corridors, aisles, or pathways. Temporary exemptions may be approved by EHS and/or GFD
- Exit doors must remain unlocked during hours in which the building is occupied. All special locking devices must be approved by Facilities Management.
- Minimum aisle widths must be maintained at all times

### 2. Protrusions:

- Lights, decorations, signs, or any other item hung from the ceiling generally may not be lower than 6'8"
- Wires or cables hung from the ceiling must not present a safety hazard, such as snagging equipment being transported through the corridor

### 3. Items not permitted in corridors:

- Flammable storage cabinets
- Compressed gas bottles
- Carts, cabinets, shelves, or other items on which combustibles or flammables are likely to be stored
- Any item that will impede the normal or emergency flow of traffic or will obstruct any emergency device
- General storage materials (boxes, papers, etc.)
- Portable heaters, coffee pots, food warmers, or other devices that may present a hazard

## I. Fire / Smoke Rated Doors

Fire and smoke-rated doors are equipped with a self-closing device and are installed to keep the fire from spreading throughout a building.

Blocking fire doors open allows smoke and fire with an uncontrolled avenue through the building. The following shall apply to fire/smoke-rated doors:

- Fire/smoke-rated doors shall not be blocked open
- The self-closing devices may not be disconnected or rendered inoperable
- If special circumstances require that the door be held open for the movement of equipment or large items, the person responsible for the move will ensure the door is not left open if the building is evacuated.
- "Door chocks" or "foot stops" may not be installed on any fire-rated door.
- Furniture, appliances, etc. may not be used to block the door open.
- Doors that need to be left open for high-traffic areas or visual security may be authorized by FM, EHS, and/or GFD. If authorized, the door will require an automatic magnetic release device installed which will release the door when any emergency alarm device is activated.
- Obstructions that will prohibit fire/smoke-rated doors from closing and latching without human intervention are not permitted.

## J. Fire Detection and Alarm Systems

### 1. Tampering

Installed systems will not be tampered with in any way. Tampering is considered a criminal act. Tampering is considered to be:

- Any intentional or malicious activation of a system when there is no emergency
- The intentional deactivation of a system either by disconnecting, breaking, or removing devices, wiring, etc.
- Falsely reporting the activation of a system.

### 2. Obstructing

No part of a fire system may be obstructed at any time. Obstructions include but are not limited to:

- Fire alarm pull stations must have one-foot clearance in all directions of fire alarm pull stations
- Fire alarm bells/horns/strobes may not be visually blocked or muffled
- Smoke and heat detectors may not be covered unless specifically authorized by EHS during renovations or special operations
- Storage may not come within 18" of sprinkler heads
- Renovations that affect the operation of any system must be approved by EHS and/or GFD
- Nothing may be hung from or wrapped around any fire system device or piping
- Fire department connections must not be obstructed at any time.

### 3. False Alarm (accidental activation)

Any operation that would/could activate the system must be coordinated with EHS and the FM Building Automation Department. Such operations include but are not limited to:

- Welding (Hot Work) or other heat-producing work around sprinklers and/or heat detectors
- Sanding or other work around smoke detectors that would create a dust

- Use of smoke-producing devices that could set off smoke detectors
- Steam cleaning or painting operations that could set off detectors
- Use of open flames near any heat or smoke-sensing device;

#### 4. Testing

Only authorized UNC, GFD personnel, or their designated contractor, may conduct testing, maintenance, or repair of systems.

#### 5. Fire Impairment

Whenever it is necessary to disable fire sprinklers, fire suppression, or fire alarm systems, this impairs the proper operation of the system. If a fire system is going to be impaired for any length of time, refer to the UNC Fire Protection System Impairment Procedures.

### K. Parking, Fire Lanes, and Emergency Access

In the event of a fire emergency, emergency responders must have access to the building or location of the emergency. Fire lanes and emergency access routes have been provided for this purpose.

Fire Lanes – Fire lanes (normally marked in red on the curb) must not be blocked at any time.

Parking – Vehicles must not park on sidewalks, or in front of any facility in such a way that it will prevent emergency responders from reaching the building. Parking is prohibited inside any building unless reviewed and approved by EHS.

Emergency Access – Fire hydrants, fire department connections, or other emergency equipment must not be obstructed at any time. Parking is prohibited within 25 feet of a fire hydrant or other fire department connection.

### L. Decorations

Interior decorations are a common factor in the spread of fire. Decorations used during the holiday seasons are always a large concern. It is necessary to ensure that all decorations used will meet the requirements of safety and fire resistance.

#### 1. Electrical

The use of miniature or LED lights is encouraged as they are more energy-efficient and remain cooler than other lights. The following should be reviewed:

- Do not piggy-back extension cords and power strips, or exceed the power capacities of outlets
- Electrical decorations or cords must not be laid or taped across floors in such a way that they may cause a tripping hazard or interfere in any way with an evacuation
- Electrical cords are prohibited from going through ceiling tiles, walls, or doorways

- Electrical decorations shall be turned off at the end of each day
- Electrical decorations or cords that are damaged, worn, showing signs of overheating, etc., must be removed from service and repaired or replaced
- Electrical wiring and lighting shall be UL-listed.

## 2. Holiday Trees

Live trees are prohibited in all Residence Halls, but are allowed in other selected campus buildings as long as the following guidelines are followed:

- Natural cut trees shall have the trunk bottoms cut off at least 0.5 inches above the original cut and placed in a support device.
- Support devices shall:
  - Hold the tree securely, in the upright position, avoiding any tripping hazards.
  - Be capable of containing a minimum 2-day water supply
  - Water level shall be maintained above the fresh cut and shall be checked a minimum of once daily.
- The tree shall be removed from the building whenever the needles begin falling off.
- Trees shall be kept a distance from heat vents, open flames, or heat-producing devices that are at least equal to the height of the tree.

Artificial decorative trees must be flame-resistant or flame-retardant.

## 3. Garlands and Displays

Keep the use of garlands and displays to a minimum. Garlands or displays should not extend down hallways, as this may obstruct sprinkler heads or other fire safety systems.

Decorations may not obstruct any exit or sidewalk.

## M. Appliances and Electrical Fixtures

The leading cause of appliance-type fires is combustible material located too close to a heat source. Housing and Residential Education prohibits the use of many appliances and electrical fixtures. Refer to the Housing and Residential Education Student Handbook for further information.

The following safety tips are recommended practices:

- Keep combustible materials away from lamps and light bulbs (nothing should be stacked, rested against, or placed on top of a lamp)
- Wall lamps, heaters, etc. should not be set too near curtains, furniture, or any other combustible materials

- Make sure the lamp cord is protected by an insulated bushing or grommet where the power cord enters the lamp to prevent abrasion
- Read and follow the recommended use and safety precautions provided by the manufacturer
- Use only light bulbs equal to or less than that for which the light fixture is rated
- Check for loose connections
- Any damage, loose wiring, or any other potential safety hazard must be repaired by a qualified person, or the appliance discarded
- Purchase appliances that have been listed by a recognized testing laboratory such as Underwriters Laboratory (UL)

### Space Heaters

If a room cannot be brought to a proper temperature range by the FM HVAC Department, then a space heater unit may be used, but the following guidelines must be met:

1. Before purchasing, the space heater's make and model number and the proposed location must be submitted to Facilities Management for review.
  - Facilities Management will ensure proper electrical load capabilities of the specified room.
  - Ensure Energy Star Rated equipment only be used.
  - Equipment must be UL-listed.
2. If a space heater is approved for a location the following guidelines must be followed:
  - Units must be turned off when the room is not occupied by an individual.
  - Storage shall be separated from heaters and heating devices by distances or shielding so that ignition cannot occur.
  - Clearance of combustibles from temporary heating devices shall be maintained in accordance with the labeled equipment.

### N. Food Trucks / Trailers

When food trucks are on campus, the following rules shall apply:

- License and permits from local authorities are obtained
- Cooking equipment is attended at all times
- Food trucks/trailers must park at least 10 feet away from buildings, structures, other vehicles, or any combustible materials
- Food trucks/trailers must not block fire hydrants, fire lanes, fire department connections, exits, etc.
- Ensure there is no public seating within the mobile food truck/trailer
- Food trucks/trailers must have appropriate portable fire extinguishers
- Propane tanks must be in good condition (no leaks or rust), secure, and in an upright position
- Generators must be at least 10 feet away from buildings, structures, vehicles, and combustible materials

- Food truck/trailer exhausts shall be directed away from mobile cooking vehicles, other vehicles, buildings, structures, exits, and air intakes
- Fuel supplies must be properly stored, away from combustible and heat-producing appliances
- Electrical extension cords shall be in good condition and shall not cause a tripping hazard.

#### O. Fog Machines

Electrocution and fire are the two main hazard possibilities from using a fog machine improperly. The following guidelines shall be followed:

- 1) Dry ice machines are prohibited from being used on campus
- 2) If using the fog machine inside, contact Environmental Health and Safety (UNC) a minimum of 72 hours before the event, to review fire alarm systems in the area of the fog machine use (the fog can activate a building fire alarm).
- 3) Follow the manufacturer's instruction guidelines
- 4) Fog machine products should be used exactly as the manufacturer directs and should not be altered in any way such as by adding dyes, fragrances, or additional chemicals
- 5) Do not leave the fog machine unattended
- 6) Fog machines must be placed on a flat surface
- 7) Never place anything flammable around the unit when in use
- 8) Proper ventilation is required if used inside. Machines should be placed in a strategic location to minimize exposure to the concentrated fog as it is produced.
  - Individuals who experience adverse reactions to fog exposure should be immediately removed to a well-ventilated area and emergency services may be notified
- 9) Exposure to fog during strenuous physical activity should be minimized
- 10) Fog machines should not be located on or near a walkway or egress pathway.
- 11) Ensure that you use an electrical outlet that can handle the wattage of the machine. Use a heavy gauge extension cord.
- 12) Do not let the fog fluid run out. Some machines have built-in automatic shutoff but some may not.
- 13) Do not touch the fog machine coil and nozzle (heat hazard).
- 14) Allow the unit to cool down, after using, before touching or moving the unit
- 15) If the fog machine becomes wet or fog fluid spills on the machine while in use, do not manually turn the machine off. Flip the circuit breaker at the breaker box and allow the unit to cool down before touching
- 16) Avoid slip hazards where moisture and residue can build up
- 17) Review and keep on hand the Safety Data Sheet (SDS) during product storage and use. The SDS provides comprehensive information on the product related to handling, storage, use, and known health effects.

## **VIII. Fire Extinguishers**

The number of recorded disastrous fires has been reduced over the years due to the increased awareness, knowledge of, and use of fire extinguishers. A fire extinguisher, used properly on a fire at its earliest stage could lessen the chance of injury to people and property damage.

### **A. Responsibility**

FM is responsible for the installation, tracking, and maintenance of fire extinguishers.

### **B. Types**

The type of extinguisher made available is determined by EHS or GFD using the following factors:

- The type of hazard (combustibles, flammables, electrical hazards, chemicals, etc.).
- The number of combustibles and/or flammables in the area.
- The best agent to be used on the hazard(s) (i.e., water, dry chemical, carbon dioxide, or other agents).

### **C. Location**

The location of the extinguisher will be determined by EHS or GFD.

- The extinguisher will be located at or near the exits in the normal path of travel to the exit.
- The travel distance to reach an extinguisher will be no further than 75 feet.
- The extinguisher will normally be visible and identifiable.
- The extinguisher must remain located in its designated location. Do not remove the extinguisher for use as a doorstop, to cover a welding operation, for a barbecue, etc
- The extinguisher must not be hung higher than four feet from the floor or lower than four (4) inches off the floor.

### **D. Inspection**

Extinguishers must be inspected periodically. The custodial department or designated person should check each extinguisher visually at least once per month. This check will include:

- Ensuring the extinguisher is at its designated location
- Checking the pressure on the gauge (tamper seal on CO2 extinguishers)
- Checking to see that the safety pin is in place and sealed
- Checking the extinguisher for any obvious physical damage
- Documentation that the checks were completed

#### E. Maintenance

FM will conduct periodic maintenance and testing of all fire extinguishers. This includes:

- Annual inspection
- Hydrostatic testing periodically (5-12 year cycles)
- Repair of damaged extinguishers
- Recharging of extinguishers
- Replacement of unusable extinguishers

#### F. Misuse of Extinguishers

The following will be considered tampering/vandalism:

- Discharging an extinguisher for any reason other than extinguishment of a fire;
- Damaging any part of the extinguisher intentionally or accidentally through carelessness.

#### G. Reporting Discharged or Damaged Extinguishers

Never put an extinguisher back in its place after extinguishing a fire. If an extinguisher has been discharged (even for only a few seconds), if the seal has been broken, or if it is damaged in any way, report the extinguisher's location to FM.

### **IX. Fire Suppression Systems**

Fire Suppression Systems on campus are unique, as they are designed for individual departments' operational requirements to protect specific types of equipment, which in most cases is an alternative to using a fire sprinkler system. However, some areas have double fire suppression protection with the installation of two fire suppression systems (fire sprinkler system with a suppression system).

#### A. Responsibility

It is the responsibility of Facilities Management for the installation, maintenance, and any other outside contract work needed to be done with these suppression systems.

#### B. Types

There are several types of systems used in facilities on campus in conjunction with job-specific functions.

##### 1. Kitchen

Commercial cooking equipment requires special ventilation hoods and ductwork, special fire suppression systems, and automatic utility shutoff that shall comply with regulations. These systems are specifically designed to handle oil fires or oil vapor flashovers within a hood ventilation system.

## 2. Electrical Information Technology Towers

Carbon Dioxide or Dry Chemical agents are utilized for special systems that are designed to extinguish fires in sensitive electrical components areas where normal sprinkler systems typically would be placed. UNC utilizes two types:

- Aero-K
- FM-200

### C. Location

The locations of these suppression systems are as follows:

#### Kitchen Units/Number of Systems

- University Center Kitchens (2)
- Holmes Dining Facility (6)
- Toby Kendall Dining Facility (3)

#### Special Extinguishing Agents

- McKee Hall Carter Hall
- Gray Hall
- Ross Hall
- Heat Plant

### D. Inspections

Inspections shall consist of:

- Suppression systems are required semi-annually.
- Facilities Management coordinates the dates
- Facilities Management shall impair the systems for testing purposes.
- The kitchen unit ventilation systems have to be thoroughly cleaned of all grease and grease solids prior to system checks.

### E. Maintenance

All maintenance of Fire Suppression Systems is conducted by certified contractors and coordinated through Facilities Management.

## **X. Event Management – Fire and Safety**

Events and activities occur daily at UNC. These take planning and preparation. UNC has developed procedures that shall be used to coordinate the safety of events and activities. Anyone who is planning an event or activity on UNC campus shall follow the guidance of the UNC Events Fire and Safety Procedure.

## **XI. Contractors**

Contractors hired by any UNC department are required to comply with the policies and procedures of this institution. Where applicable: unless the contractor has its own approved safety program that equals or exceeds UNC's program, all contractors will ensure that their employees are aware of this safety program, and the fire reporting and evacuation procedures of the facility in which they are working. In all cases, the more restrictive code or standard shall apply. UNC departments hiring outside contractors should ensure the contractors are made aware of the contents and requirements of this document.

## **XII. Training**

The best way to avoid a fire is to be knowledgeable of fire hazards and how to prevent them. Specific training for processes of facilities will be provided by the EHS Department upon request (training may include; general fire safety, fire extinguishers, hot work, etc.).

All training records must include the dates of training sessions, contents or a summary of the training session, name(s) of person conducting the training, and names of persons attending the training session. All training records will be maintained by the EHS department for a minimum of 3 years.



## ***FIRE / SAFETY DRILL REPORT***

Date:	Building:	Location:
Day:	Department:	

Management Contact:
Academic Contact:
Employee / Hall Director (if applicable):

### **Fire Drill Information**

Inspector(s):	Alarm Time Started:	Alarm Time ended
Building Occupancy:	Evacuees: Evac time:	

**Inspection** ☐   
 **Investigation** ☐   
 **Concern** ☐   
 ***Drill*** ☐   
 **Other** ☐

Type of issue	Problems / Issues Identify Area(s)	Responsible for Corrections

Comments:
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