POL 04.25.09 Fire Prevention Policy

Authority: Chancellor

History:

• First Issued:

Related Policies and Regulations:

- REG 04.25.03 Bonfire Safety Regulation
- The UNC Policy Manual 300.8.3(G),
- NCGS § 14-269.2 Weapons on Campus

Additional References:

- <u>North Carolina Fire Code</u>,
- National Fire Protection Association,
- Occupational Safety and Health Administration
 - o <u>29 CFR 1910 Subpart E</u>
 - <u>29 CFR 1910 Subpart L</u>,
- <u>NC Building Code</u>,
- <u>NC Mechanical Code</u>
- <u>NFPA 80</u>, <u>NFPA 72</u>, <u>NFPA 30</u> and <u>NFPA 10</u>
- UNCP EHS Chemical Hygiene Plan
- <u>Hazard Communication Program</u>.
- Space Heater Use Program

Contact Info: Environmental Health and Safety Officer, (910-521-6792)

1. INTRODUCTION

1.1 The purpose of the University of North Carolina Pembroke (UNCP) Fire Prevention Policy is to eliminate or minimize the causes of fire, prevent injuries and/or the loss of life and property by fire or its' byproducts, and aid in compliance with the <u>NC Fire Code</u> and the <u>Occupational Safety</u> and <u>Health Administration's</u> (OSHA) standards for fire prevention and egress (<u>29 CFR 1910</u> <u>Subpart E</u>) and fire protection (<u>29 CFR 1910 Subpart L</u>). It also provides employees with information and guidance which will assist them in recognizing, reporting, and controlling fire hazards.

1.2 UNCP is committed to minimizing the hazards associated with fire and its' hazardous byproducts to employees, students, visitors, and university property. UNCP endeavors to ensure compliance with all applicable laws, regulations, and codes while maintaining best management practices pertaining to fire prevention and protection. 1.3 This policy establishes requirements for the proper use of equipment and property on the UNCP campus that may contribute to or increase the risk of fires on campus.

2. SCOPE

2.1 This Policy applies to all members of the UNCP Community including Faculty, Staff, Students, contractors, and visitors to the UNCP Campus and all properties owned or leased by the university.

3. RESPONSIBILITIES

3.1 It is the responsibility of each employee (faculty and staff) to follow this policy and to maintain their work area free of known fire hazards. Employees should practice good work habits and recognize actions or situations that may contribute to, increase the risk of, or start a fire on campus.

3.2 It is the responsibility of each Dean, Director and Supervisor to ensure that this policy is followed by their direct reports and to report known fire hazards to the Environmental Health and Safety (EH&S) Office as soon as possible after discovering a fire hazard.

3.3 It is the responsibility of the EH&S Office to mitigate and prevent known fire hazards on the UNCP Campus and to educate and promote fire safety awareness across the university.

3.4 The EH&S Office has been delegated the authority to enforce this policy as well as author, promote and enforce other campus policies and programs that support applicable Environmental, Health, and Safety laws, codes, regulations, and policies.

4. PREVENTING FIRES

4.1 Preventing Electrical Fires

4.1.1 Extension Cords

4.1.1.1 Extension cords are permitted as long as they are maintained in good condition without splices, deterioration or damage. Damaged cords cannot be repaired but must be replaced.

4.1.1.2 Power strips that incorporates a surge protector and circuit breaker are recommended. Splitters shall not be used on campus.

4.1.1.3 Only heavy duty grounded (3-prong) extension cords shall be used.

4.1.2 Electrical Panels

4.1.2.1 Electrical panels should not be accessed nor tampered with by any unauthorized personnel. Only UNCP authorized and qualified personnel will be allowed access to electrical panels.

4.1.2.2 Securing Electrical Panels: Any electrical panel controlling equipment essential to the campus and that may be easily accessed may be secured by locks or other methods to ensure the continuous operation and prevent inadvertent shutdown of critical equipment.

4.1.3 Electrical Outlets and Switches

4.1.3.1 An overload on the electrical system may be possible and cause an outlet to overheat and catch fire. All outlets must meet the following requirements:

4.1.3.1.1 Have the cover plate securely fastened to the outlet box.

4.1.3.1.2 Be in good repair and be replaced if damaged or broken.

4.1.3.1.3 Be protected by a Ground Fault Circuit Interrupter (GFCI) when located within six (6) feet of a water source.

4.1.3.1.4 Repeated breaker trips must be reported to the Facilities Operations Electrical Shop Supervisor.

4.1.4 Electrical Decorations

4.1.4.1 Electrical lights, decorations and cords should not be used on or near combustible vegetation, dry trees, curtains, or any other combustible material, which may be ignited by heat or a potential electrical short in the device.

4.1.4.2 Multiple electrical devices may be plugged into an approved power strip which incorporates a breaker, on/off switch and can reach the outlet without connection to another power strip or an extension cord. This does not pertain to heat producing devices that must be plugged directly into an outlet.

4.1.4.3 Electrical lights, decorations and cords must be turned off and should be unplugged at the close of business hours or when unattended for any length of time.

4.1.4.4 Electrical lights, decorations and 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.

4.1.4.5 Any electrical light, decoration or cord that is damaged, worn, showing signs of overheating, etc., must be unplugged immediately and replaced.

4.2 Storage

4.2.1 Storage, in and of itself, does not constitute a fire hazard but problems arise when stored items combine to present a hazard or 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.

4.2.2 General Storage pertains to any room or building used for the storage of ordinary combustibles for temporary, long-term or permanent storage. The following criteria are required for storage compliance:

4.2.2.1 Combustible materials must be separated from other hazardous materials such as flammables, corrosives, explosives, oxidizers, etc.

4.2.2.2 Stored materials must be kept at least three (3) feet from any heat source.

4.2.2.3 Stored materials must be at least eighteen (18) inches below the horizontal plane of the bottom of sprinkler heads. To find the proper storage height in a sprinkled building, measure eighteen (18) inches below the sprinkler head in the room and from wall to wall, the storage must not go above this height.

4.2.2.4 In a non-sprinklered building, stored material must be twenty-four (24) inches from the ceiling, wall to wall.

4.2.2.5 Aisles in any room used for storage must have a minimum of three (3) feet width to allow for evacuation and for firefighters to gain access to the most remote area of the room.

4.2.2.6 Storage must not block access to fire extinguishers, fire alarm pull stations, emergency or exit lighting, access to evacuation routes, exits, emergency equipment, or entry of emergency personnel.

4.2.2.7 Storage under stairs or in stairwells is not permitted.

4.2.2.8 Doors to storage rooms must remain closed except when entering or leaving the room.

4.2.2.9 Smoking is not be permitted in any storage area nor within 100 feet of any state-owned building.

4.2.3 Hazardous Material and Flammable Storage

4.2.3.1 It is critical that flammables not only be used properly, but also stored safely.

4.2.3.2 The following are required for flammable storage compliance:

4.2.3.2.1 In any location where there is more than a total of ten (10) gallons of flammables, these materials are required to be stored away from combustibles and stored in an approved "flammable storage cabinet." This cabinet must be labeled and must incorporate self-latching and self-closing doors. All flammable liquids must be stored in a "flammable storage cabinet" when not in use.

4.2.3.2.2 Ordinary combustibles (paper, cardboard, wood, etc.) must not be stored in flammable storage cabinets.

4.2.3.2.3 Oily or grease-laden rags must be kept in metal self-closing containers.

4.2.3.2.4 Only metal flammable storage cabinets meeting the requirements of Chapter 14 of <u>NFPA 30</u> shall be used.

4.2.3.2.5 Hazardous materials must be stored in separate cabinets or rooms according to their reactive properties. (Do not store incompatible materials in the same flammable storage cabinet).

4.2.3.3 Additional information and requirements are contained in the <u>UNCP EHS Chemical</u> <u>Hygiene Plan</u> and <u>Hazard Communication Program</u>.

4.2.3.4 Always read the applicable Safety Data Sheet to verify specific chemical hazards as well as if any special storage conditions are required.

4.3 Open Flames

4.3.1 The EH&S Office must be contacted at 910-521-6792, 910-775-4772, or <u>safety@uncp.edu</u> to obtain approval for any type of open flames on campus.

4.3.2 Open Flames - Indoors

4.3.2.1 Open flames (particularly when such burning will activate the fire alarm detection/suppression system) is prohibited. Special exceptions may be authorized by obtaining a <u>Hot Work Permit</u> prior to any indoor open flame. Refer to the <u>UNCP Hot Work Safety Program</u> for instructions on the permitting process.

4.3.2.2 The use of candles in all university buildings (owned or controlled) is prohibited unless prior approval has been obtained from the EH&S Office, such as for ceremonial purposes.

4.3.3 Open Burning Outdoors - Bonfires

4.3.3.1 Open burning outdoors, such as bonfires, may be authorized once a completed <u>UNCP</u> <u>Bonfire Request Form</u> has been submitted to the EH&S Office no less than thirty (30) days in advance of the date of the event. The form will include the date and time the bonfire is scheduled to take place. The EH&S Office will discuss locations that are available to host a bonfire at the time of the request. Each bonfire must remain in compliance with the <u>UNCP Bonfire Safety</u> <u>Regulation</u>.

4.4. Personal Space Heaters

4.4.1 Per the North Carolina Office of State Human Resources (NCOSHR) <u>Space Heater Use</u> <u>Program</u>, space heaters are not intended for use as a permanent heating appliance and should be the last resort following attempts by Heating, Ventilation, and Air Conditioning (HVAC) personnel from Facilities Operations to resolve issues with the building heating system.

4.4.2 Space heaters may only be authorized for use on the UNCP campus if the work area cannot be maintained between the indoor temperature range of 68°F to 76°F. Facilities Operations HVAC personnel must be contacted first for any issue involving temperature control in campus buildings, owned or controlled.

4.4.3 All UNCP employees (Faculty and Staff) must comply with the terms of the NCOSHR Space Heater Use Program.

4.4.4 Portable Outdoor Space Heaters

4.4.4.1 All heaters shall be UL listed, (or similar accredited listing agency), for their use.

4.4.4.2 All combustible materials (including tree branches) must be kept ten (10) feet clear from top of heater.

4.4.4.3 Do not place heaters under building overhangs or soffits.

4.4.4.4 Keep a minimum of three (3) feet clearance around all heaters.

4.4.4.5 Use only the recommended fuel type as specified by the heater manufacturer. Adhere to all manufacturer's instructions and guidelines.

4.5 Explosives/Pyrotechnics/Fireworks

4.5.1 The use, possession, or sale of firearms, explosives (including fireworks or pyrotechnics), ammunition (including live or empty shells/bullets), or other weapons on university property or at an event sponsored or supervised by the university or by any recognized university organization is prohibited. (NCGS § 14-269.2 Weapons on Campus)

4.5.2 University sponsored firework displays (or pyrotechnics) are allowed. Contact the EH&S Office no less than two weeks prior to each event and the EH&S Office will obtain the required permit from the Robeson County Fire Marshal for the event.

4.6 Wall Decorations and Finishes

4.6.1 Interior decorations are a common factor in the spread of fire and decorations used during the holidays are always a concern. It is necessary to ensure that all interior decorations used meet the requirements of section 807 of the <u>North Carolina Fire Code</u>.

4.7 Safe Cooking Procedures

4.7.1 Permitted cooking areas include:

4.7.1.1 Restaurant style establishments or institutional food production areas such as the University Center Cafeteria.

4.7.1.2 Residential buildings in areas designated for cooking (i.e., kitchen or designated (outside) barbecue area).

4.7.1.3 Employee lounges and break rooms where appliances are installed in compliance with the appropriate standard, and the area is maintained in a safe manner (i.e. stoves/ovens are properly vented and turned off when not in use).

4.7.2 Non-permitted areas include:

4.7.2.1 Laboratories, classrooms, chemical or general storage areas, toilets or hazardous material storage areas.

4.7.2.2 Sleeping areas in dormitories.

4.7.2.3 Automotive areas, trades' shops, industrial and manufacturing settings.

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

4.7.3.1 Stoves/ovens, when installed, must have a vent and grease filter over the stove. Where a grease filter is not installed, cooking must be limited to foods that will not produce grease-laden vapors.

4.7.3.2 Combustible materials, such as potholders, paper towels, etc., must be kept at least 18 inches from the stovetop and burners.

4.7.3.3 An ABC rated fire extinguisher shall be installed near the kitchen cooking area. Note: the closest extinguisher may be in the hallway outside each residential suite.

4.7.3.4 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 and food removed from the burner.

4.7.3.5 Check all burners on the stove and the oven before leaving to ensure that all units are turned off.

4.7.4 Barbecue Grills (Smokers, Gas and Charcoal)

4.7.4.1 Barbecue grills of any kind are not permitted for use inside buildings.

4.7.4.2 Barbecue grills must not be used within ten (10) feet of a building.

4.7.4.3 All gas lines, valves and connections on gas grills must be periodically checked using soapy water to detect leakage. If a leak is detected, the grill will be taken out of service until repaired.

4.7.4.4 When using a charcoal grill, flammable charcoal lighter fluid must be used prior to lighting.

4.7.4.5 Do not add lighter fluid after the charcoal is lit.

4.7.4.6 Do not leave a grill unattended.

4.7.5 Commercial or Institutional Cooking

4.7.5.1 All cooking equipment, hood, and fire suppression equipment must be installed in accordance with the <u>NC Building Code</u> and the <u>NC Mechanical Code</u>.

4.7.5.2 Cooking equipment, hood and grease filters must be cleaned on a regular basis to prevent grease build-up.

4.7.5.3 All kitchen staff/personnel who are subject to be in the area during operation of the equipment should be trained on the hazards involved, use of the portable and automatic fire suppression, fire evacuation, and fire reporting procedures.

5. DETECTING AND SUPPRESSING FIRES

5.1 Fire Detection, Alarms, and Suppression Systems

5.1.1 The requirement to maintain a working fire detection and alarm system is the responsibility of UNCP Facilities Management (FM). FM will review the requirements of type and location for fire detection/suppression and alarm systems.

5.1.2 It is the occupants' responsibility to be aware of the type of alarm system in the building and how to react to an alarm. If the fire alarm in the building activates, everyone <u>must</u> evacuate the building with the exception of campus first responders.

5.1.3 Miscellaneous Fee for Tampering with Campus Fire/Life/Safety Equipment

5.1.3.1 In the event that any faculty, staff, student, visitor, or contractor is found to have negligently activated a fire alarm system or maliciously tampered with any Fire/Life/Safety equipment on campus, they may be subject to the UNCP Miscellaneous Fee for Tampering with Fire/Life Safety Equipment.

5.1.3.2 Tampering with Fire/Life Safety Equipment includes, but is not limited to, tampering with fire extinguishers, covering or removing smoke detectors or sprinkler heads, damaging emergency evacuation signs and/or lights, or negligently activating the building fire alarm system.

5.1.3.3 Installed systems must not be tampered with in any way. Tampering is considered a criminal act by the State of North Carolina (NCGS \S 14-286) and is defined as:

5.1.3.3.1 Any intentional, negligent, or malicious activation of a system when there is no emergency.

5.1.3.3.2 The intentional deactivation of a system either by disconnecting, breaking, covering, or removing devices, wiring, etc.

5.1.3.4 Falsely reporting the activation of a system.

5.1.4 No part of the system must be obstructed at any time. Obstruction includes the following conditions:

5.1.4.1 Fire alarm pull stations must be accessible at all times. No storage, furniture, etc. may obstruct any pull station. See 4.2.2.6

5.1.4.2 Fire alarm bells/horns/strobes must not be visually blocked or muffled.

5.1.4.3 Smoke/Heat detectors must not be covered unless specifically authorized by the EH&S Office or FM. (See 5.1.4.4)

5.1.4.4 Renovations that affect the operation of any system must be approved by FM.

5.1.4.5 Nothing must be hung from or wrapped around any system device or piping.

5.1.4.6 Fire department connections must not be obstructed at any time.

5.1.4.7 Decorations must not be attached to, hung from, or obstruct any emergency device (sprinklers, smoke detectors, and exit signs).

5.2 Prevention of False Alarms

5.2.1 Any operation that would activate the alarm system must be coordinated through the EH&S Office and FM. Such operations include, but are not restricted to:

5.2.1.1 Welding or other heat producing work around sprinklers and/or heat detectors.

5.2.1.2 Sanding or excessive dust generated by large scale cleaning events or non-routine cleaning services (Ex: using compressed air to clean surfaces indoors) around smoke detectors, which would create dust sufficient to activate the alarm system.

5.2.1.3 Use of smoke producing devices, steam cleaning, or spray painting that could potentially set off smoke detectors.

5.2.1.4 Use of open flames near any heat or smoke-sensing device.

5.3 Fire Alarm and Fire Suppression System Testing

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

5.3.2 Any person making repairs to a campus fire alarm system shall be qualified per <u>NFPA 72</u> – National Fire Alarm and Signaling Code.

5.4 Fire Extinguishers

5.4.1 EH&S is responsible for the tracking, maintenance, and replacement of fire extinguishers in all UNCP campus buildings, owned or controlled.

5.4.2 Campus fire extinguishers shall be maintained in accordance with $\underline{NFPA \ 10}$ – Standard for Portable Fire Extinguishers.

5.4.3 Fire extinguishers are classified based on the class of fire they are rated to extinguish.

5.4.4 The two most common types of extinguishers found on campus are the "ABC" and "K" class extinguishers.

5.4.5 "ABC" dry chemical fire extinguishers are located throughout the UNCP campus and can be used to extinguish small fires involving wood, paper, flammable or combustible liquids, and electrified circuits.

5.4.6 Class "K" is a wet chemical extinguisher and is most often used to suppress kitchen fires involving grease or oil.

5.5 Extinguisher Inspection

5.5.1 Fire extinguishers must be inspected within every thirty (30) days. This check will include:

5.5.1.1 Ensuring that the extinguisher is in its designated location.

5.5.1.2 Checking the pressure on the gauge (or tamper seal on carbon dioxide (CO2) extinguishers).

5.5.1.3 Checking to see that the safety pin is in place and sealed.

5.5.1.4 Checking the extinguisher for any obvious physical damage.

5.5.1.5 Documentation of completed inspections.

5.6 Operation of Extinguishers

5.6.1 Employees should be trained in the operation of a fire extinguisher before attempting to fight any fire. Four basic steps to using an extinguisher can be described by using the acronym P.A.S.S:

5.6.1.1 Pull the safety pin from the handle. It will be necessary to break the plastic seal.

5.6.1.2 Aim the extinguisher at the base of the flame.

5.6.1.3 Squeeze the handle all the way down to release the agent.

5.6.1.4 Sweep the agent across the fire with a side-to-side motion. Be sure to cover the entire fire.

5.7 Misuse of Extinguishers

5.7.1 The following actions will be considered tampering/vandalism of a fire extinguisher. Each is subject to application of the UNCP Miscellaneous Fee for Tampering with Fire/Life Safety Equipment.

5.7.1.1 Discharging an extinguisher for any reason other than extinguishing a fire.

5.7.1.2 Removal or relocation of an extinguisher without specific EH&S approval.

5.7.1.3 Damaging any part of the extinguisher intentionally or accidentally through carelessness.

5.8 Reporting of Discharged or Damaged Extinguishers

5.8.1 Never put an extinguisher back in its place after use. If an extinguisher is discharged, even for a few seconds, or if it is damaged in any way, report the extinguisher and its location to 910-521-6792 or <u>safety@uncp.edu</u>.

6. ESCAPING FIRES

6.1 Corridors, Egress Routes, Exit Doors

6.1.1 In an emergency, one of the most important requirements is to ensure that all occupants can leave the building safely.

6.1.2 To accommodate this, corridors, hallways and exits are designed and constructed to allow people to leave the building in the safest and quickest method possible and must remain unobstructed at all times.

6.2 Obstructions

6.2No corridor, aisle way or component of a means of egress (exit from the building) may be obstructed at any time.

6.2.2 Furniture and other items in lobbies must not obstruct the minimum width (see Subsection 6.4) and must be arranged so there is a direct path of egress through the lobby to the exit.

6.2.3 Wires, cables or extension cords must not be laid across corridors, aisles or pathways.

6.2.4 Egress doors shall not be locked from the egress side (inside). All access-controlled, delayed egress and special locking devices must meet the requirements of the <u>NC Fire Code</u>.

6.3 Protrusions

6.3.1 Furniture, artwork, wall hangings, statues, etc., which protrude from the walls must not obstruct the minimum width (see Subsection 6.4) nor present a tripping or other safety hazard.

6.3.2 Decorations must not obstruct any corridor, exit or safety device

6.3.3 Items not permitted in corridors include:

6.3.3.1 Flammable storage cabinets of any size.

6.3.3.2 Compressed gas containers of any size.

6.3.3.3 Carts, cabinets, shelves, or other items on which combustibles or flammables are likely to be stored.

6.3.3.4 Chemicals, munitions, pyrotechnics, or any other hazardous materials.

6.3.3.5 Any items that will impede the normal or emergency flow of traffic or will obstruct any emergency device (Decorations, Furniture, Etc.).

6.3.3.6 Portable heaters, coffee pots, food warmers, or other devices that may present a hazard.

6.3.3.7 Unprotected high voltage, electrical or gas-powered equipment of any kind.

6.4 Minimum Widths of Corridors, Egress Routes and Exit Doors

6.4.1 Minimum widths (which must be increased accordingly with the number of occupants) range from 28 inches between desks (32 inches if wheelchair access is required), to 44 inches or greater for corridors.

6.4.2 Minimum aisle widths must be maintained at all times.

6.4.3 The minimum ceiling height in exit passageways is seven feet (7'-0").

6.4.4 Wires or cables hung from the ceiling must not present a safety hazard. For example, hanging wires must not become entangled in any equipment that is being transported through a corridor.

6.5 Fire Rated Doors

6.5.1 It is a requirement of the fire code that all fire rated egress doors are equipped with a selfclosing device, self-latch when closed, and are installed so as to keep fire and smoke from spreading throughout a building.

6.5.2 Blocking Fire Doors Open

6.5.2.1 Keeping fire rated egress doors open allows smoke and fire to travel via an uncontrolled avenue throughout the building. In order to reduce the spread of fire throughout the building, the following guidelines must be followed:

6.5.2.2 Fire rated egress doors must not be kept or blocked open, except with an approved automatic magnetic release device, which will release the door when the fire alarm system is activated.

6.5.2.3 The self-closing devices on fire rated egress doors must not be disconnected or rendered inoperable.

6.5.2.4 If the fire rated egress door must be held open for movement of furniture, equipment or other large size or number of items, the person responsible for the move will provide an individual at the fire door to ensure the door is not left open if the building is evacuated.

6.5.2.5 "Door chocks" or "foot stops" must not be installed on any fire rated egress door. Furniture, appliances, etc. must not be used to block the door open.

6.5.2.6 Obstructions that will prohibit fire/smoke rated doors from closing and latching without human intervention are not permitted.

6.5.4 All campus fire doors must be maintained in compliance with <u>NFPA 80</u> – Standard for Fire Doors and Other Opening Protectives.