



Fire Prevention Plan

Purpose & Scope

The purpose of this Fire Prevention Plan is to eliminate the causes of fire, prevent loss of life and property by fire, and to comply with the Occupational Safety and Health Administration's (OSHA) standard on fire prevention, 29 CFR 1910.39. It provides employees with information and guidelines that will assist them in recognizing, reporting, and controlling fire hazards. This standard applies to all students, faculty, and staff.

Policy

It is the policy of Fayetteville State University to provide to employees the safest practical workplace free from areas where potential fire hazards exist. The primary goal of this fire protection program is to reduce or eliminate fire in the workplace by heightening the fire safety awareness of all employees. Another goal in this plan is to provide all employees with the information necessary to recognize hazardous conditions and take appropriate action before such conditions result in a fire emergency.

This fire prevention plan complies with the requirements of 29 CFR 1910.39.

This plan details the basic steps necessary to minimize the potential for fire occurring in the workplace. Prevention of fires in the workplace is the responsibility of everyone employed by the university but must be monitored by each supervisor overseeing any work activity that involves a major fire hazard. Every effort will be made by the university to identify those hazards that might cause fires and establish a means for controlling them.

The fire prevention plan will be administered by the EHS Officer / Professional who will compile a list of all major workplace fire hazards, the job titles of personnel responsible for fire control and prevention equipment maintenance, job titles of personnel responsible for control of fuel source hazards and locations of all fire extinguishers in the workplace. The EHS Officer / Professional must also be familiar with the behavior of employees that may create fire hazards as well as periods of the day, month, and year in which the workplace could be more vulnerable to fire.

This fire prevention plan will be reviewed annually and updated as needed to maintain compliance with applicable regulations and standards and remain up to date with the state of the art in fire protection. Workplace inspection reports and fire incident reports will be maintained and used to provide corrections and improvements to the plan.

This plan will be available for employee review at any time during all normal working hours.

Established August 1, 2020
Date

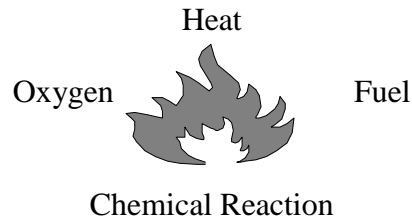
By Paul Harbison
EHS Officer / Professional

Program Statement

FSU is committed to minimizing the threat of fire to employees, visitors, and property. FSU complies with all applicable laws, regulations, codes, and good practices pertaining to fire prevention. FSU's separate Emergency Action Plan spells out the procedures for responding to fires.

Classification

Fire is a chemical reaction involving the rapid oxidation or burning of a fuel. It needs four elements to occur as illustrated below in the tetrahedron. This is described by the following illustration:



The first component of the tetrahedron is fuel. Fuel can be any combustible material such as: solid (i.e. wood, paper, or cloth), liquid (i.e. gasoline), or gas (i.e. propane). Solid and liquids generally convert to gases or vapors before they will burn.

Another component of the tetrahedron is oxygen. Fire only needs an atmosphere with at least 16% oxygen.

Heat is also a component of the tetrahedron. Heat is the energy necessary to increase the temperature of the fuel source to a point in which sufficient vapors are emitted for ignition to occur.

The final side of the tetrahedron represents a chemical chain. When these components are brought together in the proper conditions and preparations, fire will develop. Take away any one of these elements, and the fire cannot exist or will be extinguished if it was already burning.

Fires are classified into four groups according to sources of fuel: Class A, B, C, and D.

Table 1 below describes the classifications of fire which can be used in making hazard assessments.

Class A	Ordinary combustible materials such as paper, wood, and some rubber and plastic materials.
Class B	Flammable or combustible liquids, flammable gases, greases and similar materials, and some rubber and plastic materials.
Class C	Energized electrical equipment and power supply circuits and related materials.
Class D	Combustible metals such as magnesium, titanium, sodium, lithium, and potassium.

Determining Fire Hazards

Fayetteville State University will utilize the FSU health and safety inspection checklist to identify existing fire hazards. This checklist provides a guide for precise fire-safe practices that must be followed.

Hazard Identification (High-Hazard Areas)

Type	Location	Control Extinguisher Location	Responsible Personnel
Flammable / Combustible solids, liquids, & gas	Rosenthal	Room 12, 16, 22, & outside wood shop	Faculty conducting artwork
Flammable / Combustible solids, liquids, & gas	Science & Technology Labs	Hallways & Labs	Lab Faculty
Flammable / Combustible solids, liquids, & gas	Lyons Science Annex	Hallways & Labs	Lab Faculty
Grease	Rudolph Jones Student Center	Throughout dining establishment and in each kitchen	Kitchen Staff
Flammable / Combustible solids, liquids, & gas	Physical Plant (bldg. 1110) Allied Trades	One in each trades room	Allied Trades Staff
Flammable / Combustible solids, liquids, & gas	Vehicle Maintenance	Entrance, Bay Door, Outside Shop, Equipment Shed	Vehicle Maintenance Staff
Flammable / Combustible solids & gas	Central Warehouse / Central Receiving	Front entrance by office, by side bay door, & toward rear exit	Central Warehouse Staff
Flammable / Combustible solids & liquids	Print Shop	Front entrance by office & behind door entering printing area	Print Shop Staff
Electrical, hydraulic, & mechanical equipment	All buildings with mechanical, electrical, and elevator rooms	Inside or outside room & within 50 ft.	Allied Trades Staff

Material hazards shall be identified, as evident on the specific Safety Data Sheets (SDS) and labeled on containers as soon as they arrive in the workplace. The identification system shall also be incorporated into the university's hazard communication program.

Oxygen-Energized Atmospheres

Oxygen-enriched atmospheres involving laboratory supply systems and cutting and welding.

Powered Industrial Trucks

The type of power industrial truck being used shall be approved for use within any building storing hazardous materials. All refueling operations shall be conducted outside and away from storage of flammable materials. Areas that are used for maintenance and battery charging of electrical trucks should be separated from storage areas.

Storage & Handling Procedures

The storage of materials shall be arranged such that adequate clearance is maintained away from heating surfaces, air ducts, heaters, flue pipes, and lighting fixtures. All storage containers or areas shall prominently display signs to identify the material stored within. Storage of chemicals shall be separated from other materials in storage, from handling operations, and from incompatible materials. All individual containers shall be identified as to their contents.

Only containers designed, constructed, and tested in accordance with the U.S. Department of transportation specifications and regulations are used for storage of compressed or liquefied gases. Compressed gas storage rooms will be areas reserved exclusively for that purpose with good ventilation and at least a 1-hour fire resistance rating. The gas cylinders shall be secured in place and stored away from any heat or ignition source. Pressurized gas cylinders shall never be used without a pressure regulator.

General Storage

This area pertains to any room or building used for the general storage of ordinary combustibles for temporary, long-term, or permanent storage. The following is a basic guide to storage compliance:

- Combustible materials must be separated from other hazardous materials (i.e. flammables, corrosives, explosives, oxidizers, etc.).
- Stored materials must be kept at least three (3) feet from any heat source.
- Stored materials must be eighteen (18) inches below the horizontal plane of the 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 beyond this height. In a non-sprinklered building, stored material must be thirty-six (36) inches from the ceiling, wall to wall. These distances must be doubled when stock is piled higher than 15 feet.
- 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.
- Storage must not block fire extinguishers, fire alarm pull stations, emergency or exit lighting, access to evacuation routes, the exit door, emergency equipment, or entry of emergency personnel.
- Storage in stairwells and under stairs is not permitted.
- Doors to storage rooms must remain closed except when entering or leaving the room.
- Smoking must not be permitted in any storage area under any condition.
- Wooden pallets will not be stacked over 6 feet tall. If feasible, extra pallets will be stored outside or in separate buildings to reduce the risk of fire hazards.
- Piles of combustible materials shall be stored away from buildings and located apart from each other sufficiently to allow firefighting efforts to control an existing fire.

Flammable Storage and Handling

It is critical that flammables not only be used properly, but also stored safely. The following is a basic guide to flammable storage and handling compliance:

- Bulk quantities of flammable liquids shall be stored outdoors and away from buildings. Smaller quantities are subsequently brought into a mixing room where they are prepared for use. The mixing room shall be located next to an outside wall equipped with explosion relief vents. The room shall also

have sufficient mechanical ventilation to prevent the accumulation of flammable vapor concentration in the explosive range.

- 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. It is recommended that all flammable liquids be stored in a “flammable storage cabinet” when not in use.
- Sources of ignition shall not be within twenty-five (25) feet of outdoor storage, dispensing, or open use areas.
- Sources of ignition shall not be used in rooms or areas where flammable or combustible hazardous materials are stored, dispensed, or used.
- Ordinary combustibles (paper, cardboard, wood, etc.) 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 National Fire Protection Association (NFPA) standards will be used.
- Rooms used for storage must be constructed to meet the NC Building Code requirements for one (1) hour fire separation, ventilation, heating, electrical systems, and fire detection and/or suppression.
- Small quantities (limited to amount necessary to perform an operation for one working shift) of flammable liquids shall be stored in, and dispensed from, approved safety containers equipped with vapor-tight, self-closing caps, screens or covers.
- Flammable liquids shall only be used in areas having adequate and, if feasible, positive ventilation. If the liquid is highly hazardous, the liquid shall only be used in areas with a local exhaust ventilation.
- Flammable liquids shall never be transferred from one container to another by applying air pressure to the original container. Pressurizing such containers may cause them to rupture, creating a serious flammable liquid spill.
- When dangerous liquids are being handled, a warning sign will be posted near the operations, notifying other employees, and giving warning that open flames are hazardous and are to be kept away.
- Do not refuel gasoline-powered equipment in a confined space, especially in the presence of equipment such as furnaces or water heaters or while equipment is hot.
- Clean up any spill of flammable liquids immediately.

Potential Ignition Sources

Table 2 below lists common sources of ignition that cause fires in the workplace, gives examples in each case, and suggests preventive measures.

Sources of Ignition	Examples	Preventive Measures
Electrical equipment	Electrical defects, generally due to poor maintenance, mostly in wiring, motors, switches, lamps, and hot elements.	Use only approved equipment. Follow National Electrical Code. Establish regular maintenance.
Friction	Hot bearings, misaligned or broken machine parts, poor adjustment.	Follow a regular schedule of inspection, maintenance, and lubrication.
Open flames	Cutting and welding torches, gas oil burners, misuse of gasoline torches.	Follow established welding precautions. Keep burners clean and properly adjusted. Do not use open flames near combustibles.

Smoking and matches	Dangerous near flammable liquids and in areas where combustibles are stored or used.	Smoke only in permitted areas. Make sure matches are out. Use appropriate receptacles.
Static electricity	Occurs where liquid flows from pipes.	Ground equipment. Use static eliminators. Humidify the atmosphere.
Hot surfaces	Exposure of combustibles to furnaces, electric lamps, or irons.	Provide ample clearances, insulation, air circulation. Check heating apparatus prior to leaving it unattended.

Electrical

Maintenance and installation of electrical wiring, components, or electrical equipment is permitted by FSU authorized qualified electricians. FSU personnel must comply with the safe use guidelines of this program.

Extension Cords

- Extension cords, of proper size and according to their use, are permitted under the following conditions:
 - For temporary use only, not to exceed 90 days.
 - Cords exist in one continuous length. Extension cords shall be maintained in good condition without splices, deterioration, or damage.
 - As temporary wiring for holiday displays, artwork, or vendors at special events provided they meet the requirements above.
 - A multi-plug extension cord that incorporates a surge protector and circuit breaker. This form of extension cord is recommended.
 - Only heavy duty grounded (3 prong) extension cords shall be used.
- Extension cords are not permitted under the following conditions:
 - Use as permanent wiring.
 - For use on heat producing devices (i.e. heaters, coffee pots, high wattage lamps, refrigerators, microwave ovens, etc.)
 - If it creates a tripping hazard for normal traffic or in an emergency evacuation.
 - 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.
 - The cord shows signs of wear, defects, bulging, exposed wire, or other damage.
 - Located in corrosive areas or near any substance which would deteriorate the extension cord.

Electrical Panels

Electrical panels should not be tampered with by any personnel. Only FSU authorized and qualified electricians will be allowed access to electrical panels. In a location where a person has easy access to turn off the power to a piece of equipment or area in an emergency, securing methods may be required to prohibit the inadvertent shutdown of critical equipment. However, it must be recognized that shutting off power to an electrical fire is often the best action to take in a fire emergency.

- Electrical Panels must meet the following requirements:
 - Be accessible to the occupants in an emergency.
 - Be unobstructed thirty-six (36) inches in front of and in all directions around the panel.
 - Have the panel cover and panel door securely in place and closed.
 - Ensure all breakers or blanks are installed.
 - Have all breakers and main switches clearly marked as to the equipment/area that they control.

- Be identifiable as an electrical panel. Do not cover or paint electrical panels to match the wall, etc.
- Have a legible electrical circuit directory.
- Electrical Panels must not:
 - Be locked unless employee or student safety is compromised.
 - Have the breakers taped or otherwise secured in the on position (except for Fire Protection and Alarm Equipment).
 - Have any work performed on the panel unless the work is approved, monitored, and completed by a licensed electrician.
 - Have fuse(s) rated higher than specified for the circuit.

Electrical Outlets/Switches

An overload on the electrical system may be possible and cause an outlet to spark. The safety guidelines listed below must be followed.

- Outlets must meet the following requirements:
 - Have the cover plate securely fastened to the outlet box.
 - Be replaced when broken.
 - Have an approved cover.
 - Be protected by a Ground Fault Circuit Interrupter (GFCI) when located within six (6) feet of a water source.
 - It is recommended that combustible items (i.e. trash cans, boxes of paper, etc.) be kept at least two (2) feet from either side of the outlet, when possible.

Other Electrical Concerns

- Ensure that utility lights always have some type of wire guard over them.
- Investigate any appliance or equipment that smells strange. Space heaters, microwave ovens, hot plates, coffee makers and other small appliances shall be rigidly regulated and closely monitored.

Welding, Brazing, and Cutting

Welding, brazing, and cutting will not be permitted in areas not authorized by management.

If practical, welding, brazing, and cutting operations shall be conducted in well-ventilated rooms with a fire-resistant floor. If this practice is not feasible, the EHS Officer / Professional shall ensure that the work areas have been surveyed for fire hazards; the necessary precautions taken to prevent fires; and issue a hot work permit. This hot work permit shall only encompass the area, item, and time which is specified on it.

If welding is to be performed over wooden or other combustible type floors, the floors will be swept clean, wetted down, and covered with either fire-retardant blankets, metal, or other noncombustible coverings.

Welding will not be permitted in or near areas containing flammable or combustible materials (liquids, vapors, or dusts). Welding will not be permitted in or near closed tanks that contain or have contained flammable liquids unless they have been thoroughly drained, purged, and tested free from flammable gases or vapors. Welding shall not begin until all combustible materials have been removed at least 35 feet from the affected areas, or if unable to relocate, covered with a fire-retardant covering. Openings in walls, floors, or dusts shall be covered if located within 35 feet of the intended work area. Welding will not be permitted on any closed containers.

Gasoline or alcohol torches shall be placed so that the flames are at least 18 inches away from wood surfaces. They will not be used in the presence of dusts, vapors, flammable/combustible liquids, paper, or similar materials. Torches shall never be left unattended while they are burning.

Fire extinguishers will be provided at each welding, brazing, or cutting operation. A trained watch will be stationed at all times during the operation and for at least 30 minutes following the completion of the operation. This person will assure that no stray sparks cause a fire and will immediately extinguish fires that do start.

Open Burning

Open burning is defined as the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through an adequate stack, duct, or chimney. Generally, anytime a fire is lit outdoors, this is considered open burning (i.e. bonfires, artwork involving flames, etc.)

Approvals

Please contact the EHS Officer / Professional at 910-672-1827 / Safety@uncfsu.edu to obtain approval no less than thirty (30) days in advance of the event.

Open Flames

Open flames (particularly when such burning will activate any type of fire alarm detection/suppression system) is normally prohibited. Special exceptions may be authorized under the following conditions:

- Obtain a “Hot Work Permit” prior to any indoor open flame. Refer to Hot Work Program for a permit.
- The proposed burning must not endanger the occupants or facility.
- The proposed device location must not block any emergency device or access to any exit.
- The event coordinator or supervisor must be responsible for providing a trained “Fire Watch” (Refer to Hot Work Program).
- The event coordinator or trained authorized person is responsible for completely extinguishing and removing all materials.
- For all building maintenance that might require open flames or sparks refer to the Hot Work Program

Open Burning Outdoors – Bonfires

Open burning outdoors may be authorized under the following conditions:

- The event coordinator will notify the EHS Officer / Professional [(by submittal of a completed (FSU Bonfire Request Form (Attachment 1))] no later than thirty (30) days in advance of the date of the bonfire. The form will include the date and time the bonfire is expected to take place. The EHS Officer / Professional will discuss locations that are available to host a bonfire at the time of the request.
- The burn location must not block access for emergency vehicles to any building, street, or emergency device.
- Open burning fires must not be within fifty (50) feet of any flammable storage area (the distance may be increased according to the size of the event), and fifty (50) feet of any building, vehicle, or vegetation.
- One fire truck, with firefighter’s present, is required at the bonfire site for the duration of the event.
- The event coordinator will ensure that the appropriate number of assistants attend the bonfire, and that they have been trained on the requirements of the bonfire safety program. No less than two assistants per event. The sponsor or designated representative shall remain at the bonfire site for the duration of the bonfire.
- The event coordinator must contact the EHS Officer / Professional, Campus Policy, and occupants of adjacent buildings twenty-four (24) hours in advance of the event or operation for final coordination.

- The firefighters will be responsible for completely extinguishing the bonfire and ensuring that there is no residual heat left in the material that was burned.

Candles

The use of candles in ALL university buildings is prohibited unless approved by the EHS Officer / Professional. UNDER NO CIRCUMSTANCES MUST HANDHELD OPEN FLAME DEVICES, SUCH AS EXPOSED CANDLES, BE PERMITTED FOR ANY BUILDING UNLESS AUTHORIZED.

NOTE: Candles can be approved for use inside buildings for ceremonial purposes ONLY with written permission or as directed by the FSU EHS Officer / Professional

Smoking

The university has a specific policy regarding cigarette/cigar/pipe smoking in the workplace. Smoking and non-smoking areas will be clearly delineated with conspicuous signs. Rigid enforcement will be maintained at all times. The EHS Officer / Professional will enforce observance of permissible and prohibitive smoking areas for employees and outside visitors to the workplace. Fire-safe, metal containers will be provided where smoking is permitted. Non-smoking areas will be checked periodically for evidence of discard smoking materials.

Heaters

- Personal Heaters
 - When it is impossible to maintain a suitable working environment (68°F-76°F), as documented by the HVAC personnel or other qualified person, a space heater can be utilized based on the requirements of this program. The employee seeking to use a space heater must initiate the space heater permit form (See Attachment 2) and abide by the following guidelines.
 - For medical conditions requiring supplemental space heating in an otherwise suitable working environment (68°F-76°F), proper medical documentation from a Licensed Practicing Physician and recommendation for supplemental heat is required prior to approval of space heater use. (See Attachment 2).
 - The user of the space heater must follow all manufacture' operating instructions and requirements.
 - Electrical circuits shall not be overloaded. Do not reset any tripped breakers. Overloaded circuits present a fire hazard. Call Facilities Maintenance for tripped breaker resets.
 - The space heater must contain fully enclosed heating surfaces, be provided with a thermostat, tip over safety shut off, and be listed by an approved listing agency such as UL or other accredited listing agent.
 - The user must ensure the space heater is not plugged into an extension cord, multioutlet strip, or surge protector. The space heater must plug directly into an approved 120-volt AC receptacle. Space heaters and their cords shall not be positioned to create a tripping hazard in the work area.
 - The employee will ensure that the space heater is turned off when unattended and at the close of business.
 - A minimum three (3) feet area around, in front of, and above the space heater or an area greater as recommended by the manufacturer will be maintained around the space heater as clearance from combustibles. Space heaters shall not be used under desk or other furniture or equipment unless the aforementioned space requirements shall be met.
 - Portable electric space heaters shall not have worn or damaged electrical cords, and the plugs shall be in good condition.
 - Only electric-powered space heaters may be used.

- The heater must not be used in rooms or areas where flammable or combustible materials are stored, dispensed, or used.
- **Portable Patio Heaters**
 - All heaters shall be UL listed for their use.
 - All combustible materials (including tree branches) must be kept ten (10) feet clear from top of heater.
 - Do not place heaters under building overhangs or soffits.
 - Keep a minimum of three (3) feet clearance around all tables and umbrellas.
 - Use only the recommended fuel type as specified by the heater manufacturer and adhere to their instructions and guidelines.

Pyrotechnics/Fireworks

Intentional use, possession, or sale of firearms, explosives (i.e. fireworks), ammunition (i.e. 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. The term “weapons” will include, but is not limited to, the items listed above, as well as BB, pellet, paintball, and stun guns, knives, brass knuckles, martial art devices, bows and other items prohibited by North Carolina General Statute §14-269.2.

Wall Decorations and Finishes

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

Wall Finish

When planning a renovation or refinish of wall, ceilings, or floors, all new materials must meet the minimum requirements of the NC Building Code.

Approvals

Normally, specific written approvals for holiday decorations will not be required. Written approval will be required if the decorations may interfere with any safety system or may conflict with one or more of the safety requirements stated in this program.

Decoration Materials

All materials used in decorations must meet the minimum requirements of the North Carolina Fire Code (NCFC), Standard Methods of Fire Tests for Flame Propagation of Textiles and Films. General requirements include:

- Decorations must not be attached to, hung from, or obstruct any emergency device (sprinkler, smoke detectors, and exit signs).
- Combustible decorations must not be hung from ceilings in such a way that a fire could ignite the decorations and endanger the occupants before evacuation.
- Unauthorized items found during inspections will be required to be removed.

Electrical Decorations

Electrical lights, decorations and cords shall comply and be used in the following conditions:

- Do not use electrical decorations or cords on combustible vegetation, dry trees, curtains, or any other combustible material, which may be ignited by heat or a potential electrical short in the device.
- Extension cords used for temporary use in decorations are limited to ninety (90) days. The cords must be one (1) continuous length from the device to the electrical outlet.
- Multiple electrical devices may be plugged into an approved surge protector which incorporates a breaker, on/off switch and can reach the outlet without connection to another “surge protector” or an extension cord. This does not pertain to heat producing devices that must be plugged directly into an outlet.
- Electrical decorations must be turned off and should be unplugged at the end of the day or when the building will be unoccupied for an extended period.
- 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 evacuation.
- Any electrical decoration or cord that is damaged, worn, showing signs of overheating, etc., must be taken out of service and repaired or replaced. The electrical equipment must be tested and approved by a recognized testing laboratory, such as UL and must bear the appropriate label, stickers, or tag, supplied by the manufacturer.

Amount of Decorations

This program does not specifically limit the use of decorations; rather, the NC Fire Code limits combustible material in Assembly occupancies to 10% of the existing wall space and Auditorium Assembly occupancies to 75% with an existing sprinkler system. The amount of decorations used will be limited by the following criteria:

- Decoration must not obstruct any corridor, exit, or safety device.
- Decorations must not exceed the amount of combustibles that could be contained by any existing extinguishing system or quickly brought under control with a fire extinguisher.
- The amount of combustibles that would aid in the rapid spread of fire, such that it could endanger or entrap the occupants must not be exceeded.
- The amount of decorations may affect the occupant load of the area if such decorations cover any required floor area used in the calculation of the occupant load.

Cooking Safety

Cooking can be a safe and enjoyable experience if safety requirements are followed.

Permitted Areas

- Restaurant style establishments or institutional food production areas.
- Residential buildings in areas designated for cooking (i.e. kitchen or designated barbecue area).
- Employee lounges and break rooms where appliances are installed in compliance with the appropriate standards, and the area is maintained in a safe manner (i.e. stoves/ovens are turned off when not in use).

Non-Permitted Areas

- Laboratories, classrooms, storage areas, toilet rooms, or hazardous areas.
- Sleeping areas in dormitories.
- Automotive, industrial, and manufacturing settings.
- Food shall not be stored in refrigerators used for storing chemicals, animal specimens, radioactive materials, or other hazardous materials.

Special Cooking Areas

Requests for cooking in the areas mentioned above for normal or special occasions must be submitted in writing to the EHS Officer / Professional.

Safety Procedures

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

- Residential Electric/Gas Stoves
- Stoves/ovens must have electric or gas connections installed and maintained by a qualified individual.
- Stoves/ovens when installed must have a 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.
- Combustible materials (i.e. potholders, paper towels, etc.) must be kept at least 18 inches from the stovetop and any burners.
- An ABC rated fire extinguisher shall be installed 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 is inoperative the unit must be repaired or replaced.
- Check all burners on the stove before leaving to ensure that all units are turned off.

Barbecue Grills (Gas & Charcoal)

- Barbecue grills are not permitted for use **INSIDE** buildings.
- Barbecue grills must not be used within ten (10) feet of a building.
- All gas lines, valves, and connections on gas grills must be periodically checked to detect leakage. If a leak is detected, the grill will be taken out of service until repaired.
- When using a charcoal grill, flammable charcoal lighter fluid must be used prior to lighting. **DO NOT ADD LIGHTER FLUID AFTER THE CHARCOAL IS LIT.**
- Do not leave a grill unattended.
- Keep combustible materials at least ten (10) feet from the grill.
- **DO NOT** use a grill within twenty-five (25) feet of flammable storage areas.
- An ABC type fire extinguisher must always be on-site.

Commercial or Institutional Cooking

- All cooking equipment must be installed in accordance with NC Building Codes and the NC Mechanical Codes.
- All commercial cooking equipment in which grease-laden vapors are produced must have an automatic dry, wet chemical or equivalent system installed. Portable fire extinguishers (class K) must also be installed in or near the kitchen area.
- The equipment, hood and grease filters must be cleaned on a regular basis.
- Each hood and fire suppression system must be inspected according to NC Building Codes.
- 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 the portable and automatic fire suppression, fire evacuation, and fire reporting procedures.

Static Electricity

The university recognizes that it is impossible to prevent the generation of static electricity in every situation, but the university realizes that the hazard of static sparks can be avoided by preventing the buildup of static

chairs. One or more of the following preventive methods will be used: grounding, bonding, maintaining a specific humidity level (usually 60-70 percent), and ionizing the atmosphere.

Where a static accumulating piece of equipment is unnecessarily located in a hazardous area, the equipment will be relocated to a safe location rather than attempt to prevent static accumulation.

Housekeeping Preventive Techniques

The following are housekeeping techniques and procedures to prevent occurrences of fire.

- Keep storage and working areas free of trash.
- Do not use gasoline or other flammable solvent or finish to clean floors.
- Use noncombustible oil-absorptive materials for sweeping floors.
- Dispose of materials in noncombustible containers that are emptied daily.
- Remove accumulation of combustible dust.
- Ensure combustible materials are present only in areas in quantities required for the work operation.
- Ensure that if a worker's clothing becomes contaminated with flammable liquids, these individuals change their clothing before continuing to work.
- Post "No Smoking" caution signs near the storage areas.
- Report any hazardous condition, such as old wiring, worn insulation, and broken electrical equipment, to the supervisor.
- Keep motors clean and in good working order.
- Do not overload electrical outlets.
- Ensure all equipment is turned off at the end of the workday.
- Use the safest cleaning solvents (nonflammable and nontoxic) when cleaning electrical equipment.
- Periodically remove over spray residue from walls, floors, and ceilings of spray booths and ventilation ducts.
- Check daily for any discarded lumber, broken pallets, or pieces of material stored on site and remove properly.
- Re-pile immediately any pile of material which falls into an aisle or clear space.
- Use weed killers that are nontoxic and do not pose a fire hazard.

Fire Detection, Alarms, and Suppression Systems

The requirement to maintain a working fire detection/suppression and alarm system is the responsibility of FSU Facilities Management (FM). FM will review the requirements of type and location for fire detection/suppression and alarm systems. It is the occupants' responsibility to be aware of the type of system in the building and how to react to an alarm.

Every building will be equipped with an electrically managed, manually operated fire alarm system. When activated, the system will sound alarms that can be heard above the ambient noise levels throughout the workplace. The fire alarm will also be automatically transmitted to the fire department. Any fire suppression or fire detection system will automatically actuate the building alarm system.

The automatic sprinkler system, if applicable, will adhere to NFPA 13, Standard for the Installation of Sprinkler Systems. The sprinkler system and components will be electrically supervised to ensure reliable operation. This includes gate valve tamper switches with a local alarm at a constantly attended site when the valve is closed. If a single water supply is provided by a connection to the city mains, a low-pressure monitor is

included. If pressure tanks are the primary source of water, air pressure, water level, and temperature shall be supervised. If fire pumps are provided to boost system pressure, supervision will monitor loss of pump power, pump running indication, low system pressure, and low pump suction pressure.

Tampering

Installed systems must not be tampered with in any way. Tampering is considered a criminal act by the state of North Carolina. Tampering is defined as:

- 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.

Obstructing

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

- Fire alarm pull stations must always be accessible. No storage, furniture, etc. may obstruct any pull stations.
- Fire alarm bells/horns/strobes must not be visually blocked or muffled.
- Storage must not come within eighteen (18) inches of sprinkler heads.
- Renovations that affect the operation of any system must be approved by FM Project Maintenance.
- Nothing must be hung from or wrapped around any system device or piping.
- Fire department connections must not be obstructed at any time.

Prevention of False Alarms

Any operation that would activate the alarm system must be coordinated through the EHS Officer / Professional and Facilities Maintenance. Such operations include, but are not restricted to:

- Welding or other heat producing work around sprinklers and/or heat detectors.
- Sanding or other work around smoke detectors, which would create dust.
- Use of smoke producing devices that could potentially set off smoke detectors.
- Steam cleaning or spray painting that could potentially set off detectors.
- Use of open flames near any heat or smoke-sensing device.

Fire Alarm and Fire Suppression Testing

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

Fire Extinguishers

Responsibility

EHS is responsible for the tracking, maintenance, and replacement of portable fire extinguishers in FSU all buildings. Extinguishers located inside leased property are the responsibility of the landlord. Please see below for fire extinguisher classifications:

- “ABC” – These fire extinguishers are found throughout the FSU campus and are known as the universal fire extinguisher. ABC fire extinguishers can be used on wood, paper, flammable or combustible liquid fires.
- “BC” – is either dry chemical or CO₂. Used for electrical, flammable, or combustible liquid fires.
- “K” – Is wet chemical. Used for kitchen fires involving grease or oil.

Determination

The type of extinguisher made available in a particular location is determined by FM Planning and Construction or qualified firm using the following factors:

- The type of hazard (combustibles, flammables, electrical hazards, chemicals, etc.).
- The amount 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, etc.)

Location

The location of the extinguisher will be determined by the FM Planning and Construction or qualified design firm, who will coordinate the installation of the fire extinguishers. A map indicating the locations of all fire extinguishers for the university is located in the Emergency Action Plan.

- The extinguishers must be located in conspicuous locations where they will be readily accessible and immediately available for use. These locations shall be along normal paths of travel to the exit.
- The travel distance required to reach an extinguisher is between 30-75 feet, depending on the type of building.
- The extinguisher must be clearly visible and identifiable. When this is not possible, appropriate signage will be posted directing the occupant to the location.
- The extinguisher will not be obstructed or obscured from view.
- The extinguisher must remain located in its designated location. Do not remove the extinguisher to use as a doorstop, to cover welding operation, for barbecue activities, etc.
- The extinguisher must not be hung higher than five (5) feet from the floor and no lower than four (4) inches from the ground.

Inspections

The fire extinguishers will be inspected by FSU staff.

- Fire extinguishers will be inspected monthly. This check will include:
 - Ensuring that the extinguisher is in its designated location.
 - Checking the pressure on the gauge (tamper seal on carbon dioxide (CO₂) extinguishers).
 - Checking to see that the safety pin is in place and sealed.
 - Checking the extinguisher for any obvious physical damage.
- Documentation of prior completed inspections on tag shall be initialed/dated each month.

Maintenance

Facilities Maintenance, through a third party, will conduct periodic maintenance and testing of all fire extinguishers. This includes:

- Annual inspections of all extinguishers.
- Hydrostatic testing on a periodic basis (12-year cycle for ABC and 5-year cycle for K) or replacement.
- Repair of damaged extinguishers.
- Recharging of extinguishers.
- Replacement of unusable extinguishers.

Misuse

The following actions will be considered tampering/vandalism of a fire extinguisher.

- Discharging an extinguisher for any reason other than extinguishing a fire.
- Relocating an extinguisher without specific approval.
- Damaging any part of the extinguisher intentionally or accidentally through carelessness.

Operation

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

1. Pull the safety pin from the handle. It will be necessary to break the tamper seal.
2. Aim the extinguisher at the base of the flame.
3. Squeeze the handle all the way down to release the agent.
4. Sweep the agent across the fire with a side-to-side motion. Be sure to cover the entire fire.

Reporting of Discharge or Damage

Never put an extinguisher back in its place after extinguishing a fire. 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 the EHS Officer / Professional at Safety@uncfsu.edu.

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 method possible and must remain unobstructed at all times.

Obstructions

- No corridor, aisle way, or component of a means of egress may be obstructed.
- Furniture and other items in lobbies must not obstruct the minimum width and must be arranged so there is a direct path of egress through the lobby to the exit.
- Wires, cables, and extension cords must not be laid across corridors, aisles, or pathways.
- Egress doors shall not be locked from the egress side. All access-controlled, delayed egress, and special locking devices must meet the NC Fire Code.

Minimum Widths

- Minimum widths (which must be increased accordingly with the number of occupants) range from 18 inches between desks to 44 inches or greater for corridors.
- Furniture, artwork, wall hangings, statues, etc., which protrude from the walls must not obstruct the minimum width nor present a tripping or other safety hazard.
- Minimum aisle widths must be maintained at all times.

Protrusions

- The minimum ceiling height in exit passageways is seven feet (7'0")
- Wires or cables hung from the ceiling must not present a safety hazard (e.g. hanging wires must not become entangled in any equipment that is being transported through a corridor).

Items not permitted in corridors include:

- Flammable storage cabinets of any size.
- Compressed gas containers of any size.
- Carts, cabinets, shelves, or other items in which combustibles or flammables are likely to be stored.
- Chemicals, munitions, pyrotechnics, or any other hazardous materials.
- Any items that will impede the normal or emergency flow of traffic or will obstruct any emergency device
- Portable heaters, coffee pots, food warmers, or other devices that may present a hazard.

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

Fire Rated Doors

- It is a requirement that all fire rated egress doors be equipped with a self-closing device and are installed to keep fire from spreading throughout the building.

Blocking Doors

Keeping fire rate egress doors open allows smoke and fire to travel through an uncontrolled avenue throughout the building. To reduce the spread of fire throughout the building, the following guidelines are provided below:

- 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 an emergency alarm device is activated.
- The self-closing devices on fire rated egress doors must not be disconnected or rendered inoperable.
- 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.
- “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.
- Obstructions that will prohibit fire/smoke rated doors from closing and latching without human intervention are not permitted.

Training

All employees shall be instructed on the locations and proper use of fire extinguishers in their work areas. Employees shall also be instructed as to how to operate the building’s fire alarm system and be familiar with evacuation routes. The training of all employees shall include the locations and types of materials and/or processes which pose potential fire hazards. The training program shall also emphasize the following:

- a) Use and disposal of smoking materials
- b) The importance of electrical safety
- c) Proper use of electrical appliances and equipment
- d) Unplugging heat-producing equipment and appliances at the end of each workday
- e) Correct storage of combustible and flammable materials
- f) Safe handling of compressed gases and flammable liquids

Recordkeeping

The **EHS Officer / Professional** will:

- Provide portable fire extinguisher training and be responsible for maintaining training records. Records will include names of the individuals trained, type of training, date of training, and name of the trainer.
- Fire alarm, sprinkler, fire extinguisher, and kitchen hood inspections will also be maintained up to three (3) years per OSHA requirements.

Annual Review

The Fire Prevention Plan will be reviewed by the **EHS Officer / Professional**. The annual review will include current training and any documents associated with this program. When new tasks, procedures, positions,

buildings, and structural modifications are added which affect fire prevention, the Fire Prevention Plan will be updated immediately to reflect these changes.



BONFIRE REQUEST FORM

SUBMIT COMPLETED FORM TO EHS WITHIN 30 DAYS OF EVENT

Event Coordinator (Print Name): _____ **Date:** _____

Department: /Student Organization: _____

Phone: _____ **Email:** _____

Proposed Location: _____

Date of Event: _____ **Time of Burn:** _____ **to** _____

Event Sponsor: _____

Assistant: _____ **Assistant:** _____

Assistant: _____ **Assistant:** _____

By signing this, I agree that I have read all the requirements listed for a bonfire, and I agree to abide by all requirements to ensure the safety of all.

Signature of Applicant: _____

Approval of Chancellor or Designee: _____ **Date:** _____

EHS Approval: _____ **Date:** _____

Director of Police and Public Safety Approval: _____ **Date:** _____

Facilities Operations Approval: _____ **Date:** _____

Fayetteville Fire Chief Approval: _____ **Date:** _____



SPACE HEATER USE PERMIT / ANNUAL MEDICAL AUTHORIZATION FORM

Facility/Campus Name _____ Date of Request _____

Applicant's Name _____

Applicant's Email Address _____

Room Number _____ Appliance Type & Size _____

Appliance Model Number _____

Applicant Signature _____

Supervisor's Signature _____

Safety Representative Signature _____

Facility Maintenance or Electrical Representative verifying circuits will handle the appliance and auto shut off device is operating.

Maintenance Representative _____

Medical Authorization Section
(For Medically Required uses, Annual Review Required)

This permit section is not valid unless it is fully completed and signed by a licensed healthcare provider.

I confer that the employee has a medical condition and requires additional heating. By signing this document, I conclude that the addition of heating is not a preference but due to a medical condition outside the control of the employee.

The employee is responsible for purchasing the heating device and following the requirements of this program.

Dr's Practice and Address _____

Dr's Name Printed _____

Dr's Signature _____