

# UNIVERSITY OF SOUTH FLORIDA

# **Fire Safety Manual**

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# **INTRODUCTION**

University of South Florida's (USF) Environmental Health and Safety (EH&S) department ensures the continuation of a fire safe environment through inspection, education, and equipment resources for USF students, faculty, staff, and visitors. This Fire Safety Manual serves as a guide to establish and maintain a fire safe environment for all USF campus locations.

The office of the Florida State Fire Marshal (SFM) is the Authority Having Jurisdiction (AHJ) over USF and any state-owned building. The SFM office promulgates the fire codes the State of Florida adopts from the National Fire Protection Association (NFPA). Florida Fire Prevention Code represents the Florida specific requirements for fire code compliance. EH&S's fire safety personnel assist University departments with compliance with the adopted Florida Fire Prevention Code in all buildings.

# **ANNUAL FIRE SAFETY INSPECTIONS**

# **State Fire Marshal**

- A. Conducts fire inspections during the fiscal year accompanied by an EH&S fire safety representative. The purpose of these inspections is to prevent or minimize fire and life safety deficiencies in USF facilities.
- B. All inspections comply with Florida Statute 633.0215 using the adopted State of Florida Fire Prevention Code.
- C. Delivers detailed reports on all fire code deficiencies identified to EH&S for coordination of corrective actions for identified deficiencies.

# **Environmental Health and Safety**

- A. Facilitates fire code correction by assigning responsibility for specific corrective actions to Physical Plant, Facilities Planning, Housing Department, Department Chairpersons, Building Supervisors, Deans and Directors where applicable. B. Acts as the liaison for the University with the State Fire Marshal office.
- B. Assists various departments with the corrective action of cited Fire Marshal violations.
- C. State Fire Marshal (SFM) and USF Policy require correction of violations within a thirty (30) day time frame.
- D. Violations that exceed 30 days must have a corrective action plan submitted to EH&S indicating the date of projected correction.
- E. Monitors the corrective action on all violations and corresponds with SFM.

# **University Colleges and Departments**

- A. Each College or Department has responsibility to correct cited code violations reported by FH&S.
- B. Responsible parties must forward corrective action reports to EH&S within the time frame specified in the notice of violation correspondence.

- C. Indicate on the State Fire Marshal report deficiency line the corrected date for each violation.
- D. When the violation correction date exceeds the thirty (30) day time frame, inputs the projected completion date on the deficiency line of the report.
- E. College or Departments may submit the SFM report to EH&S via scan and email, campus mail, etc., within the thirty (30) day time frame.

# **RESIDENCE HALLS**

- The design and construction of Residence halls meets a reasonable level of life safety. The fire alarms, fire sprinkler systems, smoke detectors, and extinguishers are to be inspected on a regular basis. Fire safety instructions and procedures exist in all halls to ensure occupant safety and minimize fire and smoke hazards.
- Housing administration personnel work closely with EH&S to take every precaution to prevent fires and ensure student safety. Fires can still occur, and fire prevention is everyone's responsibility. The manner in which residents react in the event of a fire can mean the difference between life and death.
- The following items listed below are things residents can do to assist the fire and life safety program:

# **Residence Hall Fire Drills**

1. One (1) fire drill per semester is required within the first three weeks of each academic term. These fire drills enable residents to identify their exits, become familiar with the sound of the fire alarm system, and learn the designated safe relocation area for their building.

# 2. Roles and Responsibilities:

# A. Resident Life Coordinator

- 1. Collaborate with EH&S to arrange, conduct, record, and document results of fire drills.
- 2. Ensure everyone participates in the drill which includes residents, visitors, guests, employees, and attendants.
- 3. Post egress diagrams that indicate two routes to the exterior of the building from all rooms including from bedrooms.
- 4. Ensure drill participants meet at the designated relocation area at least 150 feet from the building.
- 5. Have a method of calling 9-1-1 near the designated relocation area that does not involve re-entering the building.
- 6. Ensure those with disabilities are accounted for and, if unable to evacuate, shelter in the area of refuge/rescue.
- 7. Meet directly after fire drill to evaluate the success of the drill and discuss lessons learned.

8. Complete and submit a copy of the <u>Fire Drill Evaluation Form</u> to EH&S within 48 hours and maintain a copy for Housing records.

# **B. Environmental Health and Safety**

- 1. The EH&S Fire safety representative present shall terminate the fire drill by:
  - A. Informing maintenance alarm technicians to reset the building alarm system.
  - B. Notify building occupants that the building is clear and the drill is complete.
  - C. Notifying the appropriate dispatcher(s) that the drill is completed.
  - D. Ensure completion of Fire/Evacuation Drill Form to include date, time, results and suggestions for improvements of the drill.

# **Residence Halls Fire Safety**

- Decorations: Flammable items such as tapestries, fishnets, parachutes, sheets and
  paper may not be hung from walls or ceilings. All decorations (holiday, etc.) must be
  treated with flame retardant. Christmas trees must be artificial, bearing UL labels.
  Real trees, natural wreaths, etc. present an extreme fire hazard once dry and are
  prohibited. No decorations that extend down corridor walls are allowed. Decorations
  must clear all sprinkler heads by at least 18 inches.
- 2. Electrical Overloads: Extension cords are a major cause of residential fires, avoid using them. If your circuit breaker trips, it is possible someone is overloading the circuit or is using a defective appliance. If this happens, report it to the hall office. Too many of certain types of appliances such as coffee makers, popcorn poppers, hair dryers, and curling irons may overload the electrical circuits. To reduce the risk of fire resulting from overloaded circuits, we strongly recommend the use of a multi-plug circuit breaker power cord.
- 3. **Transportation related devices:** USF Environmental Health and Safety completed an evaluation of the fire hazard potential of transportation related devices powered by Lithium-Ion batteries/battery packs. Due to their serious potential fire hazard, the operation, charging, or storage of transportation related devices with Lithium-Ion batteries/battery packs are prohibited inside buildings on campus, including Housing & Residential Education Buildings (unless the device receives specific prior approval through the Office of Student Accessibility Services). This includes, but is not limited to, hover boards, skateboards, scooters, Segways, etc.
- 4. **Appliances:** Electrical appliances that can generate heat or malfunction should never be left unattended. They should be unplugged after use and not stored until they are cool enough to touch.
- 5. **Portable Electric Heaters:** Personal portable electric heaters should not be used except under extraordinary circumstances and after conditional written approval by Housing

personnel. UL listed baseboard heaters distributed by Housing are acceptable provided the circuits are not overloaded and other safety precautions are observed.

- 6. Open flames: Many fires occurring in residence halls are a result of burning candles. Camp stoves, candles, open coil heating or cooking elements, lava lamps, kerosene lamps, charcoal, hookah coals, etc., can be extremely hazardous. These open flame devices are not permitted in residential rooms. Similarly, burning incense is not allowed. Cooking on barbecue grills and hibachis is not allowed in or around residential buildings. Activities such as making candles or waxing skis are not permitted in your room or areas in the halls other than those designated. Bonfires or any burning of loose material is strictly prohibited on campus.
- 7. **Trash:** All combustibles, such as paper, should be disposed of in outdoor trash bins as soon as possible. Full wastebaskets and recycling bins are an invitation for fire. Never place newspapers or other combustible or flammable materials in corridors, stairwells, or other common areas.
- 8. **Flammable Liquids (and other hazardous chemicals):** Gasoline, ether, paint, glue, etc. are not permitted in student rooms or storage areas. Motorized vehicles are prohibited in resident buildings under any circumstances.
- Smoking: Smoking is prohibited in all Residence Halls and Greek Housing. Smoking in bed is extremely dangerous and is one of the primary causes of fires in living areas.
   Careless disposal of matches and cigarette butts is also a common cause of fire.
- 10. **Halogen Lamps:** Due to the high temperatures emitted from halogen lamps, they are prohibited in the residence halls. It has been reported that many fires are caused by materials coming in contact with the halogen bulb or other parts of the lamp.
- 11. **Foam rubber:** Foam rubber emits deadly toxic gases when it burns and should not be used in student rooms. Most "bean-bag" chairs are stuffed with foam rubber. Foam rubber-filled items are prohibited in student rooms.
- 12. **Cooking:** Cook safely and only in permitted and designated areas or kitchens using proper appliances. Microwaves can cause burns, or even start a fire.

# A. To Prevent Cooking Fires in the Kitchen:

- 1. Never leave cooking appliances unattended. An unattended cooking appliance is the #1 cause of cooking fires.
- 2. Wear short or close-fitting sleeves. Loose clothing can catch fire.
- 3. Clean cooking surfaces to prevent food and grease build-up.
- 4. Keep curtains, towels, and potholders away from hot surfaces.
- 5. Store solvents and flammable cleaners away from heat sources.
- 6. Turn pan handles inward to prevent accidental spilling.
- 7. To extinguish a kitchen cooking fire, follow these procedures:

- A. Slide a pan lid over flames to smother a grease or oil fire, then turn off the heat source and leave the lid in place until the pan cools.
- B. Make sure a dry chemical fire extinguisher is located near to the cooking area. Go to the page 11 for fire extinguisher operation (P.A.S.S. Procedures).
- C. Never use water or flour on grease fires.
- D. If you have a fire in the oven, leave the door closed and shut off the heat to smother the fire.

# **Tampering with Fire Protection Systems**

- The fire protection systems (i.e., alarm, sprinkler, extinguishers, etc.) in residence halls
  are for your protection. Tampering with smoke detectors, sprinkler heads, sprinkler
  piping, alarm boxes, and fire extinguishers is illegal and constitutes a felony of the third
  degree. Remember, this is your life safety equipment. You will be held accountable
  and liable for any damage that may endanger the lives of other residents.
- 2. Hanging items from the sprinkler head or pipes is prohibited.
- 3. False Alarms may occur in residence halls accidentally or due to tampering. How do you know if it is a false alarm? You don't! So, get out!

# LABORATORY FIRE SAFETY

### **General:**

- A. All exit doors must remain free of obstructions and maintain a minimum of 36" of clear access width to reach all exits.
- B. Emergency exits shall remain unobstructed and must be accessible at all times.
- C. Work areas shall remain free of clutter.
- D. Saw dust must not accumulate in shops and shall be cleared away daily.
- E. Electrical panels shall remain accessible with a minimum of 36 inches of clear access width to reach front of the panel.
- F. Extension cords shall not be used as permanent wiring and must remain in good condition.
- G. All storage must remain a minimum of 18 inches below fire sprinklers.
- H. In buildings not protected by a fire sprinkler system all storage must remain 24 inches below the ceiling.
- I. Appropriate fire extinguisher shall be within a maximum travel distance of 75 feet of all workstations.

# Flammable and Combustible Storage:

- A. Properly label all chemical containers to identify contents.
- B. Flammable and combustible liquids must be properly stored when not in use.
- C. Quantities that exceed a day's supply, usually a gallon maximum, must be kept in flammable storage cabinets.
- D. When leaving an area, store all flammable liquids in approved container/storage areas.
- E. The quantity of flammable liquids must not exceed the storage capacity of the space.

# Cylinder handling and storage:

- A. All cylinders must have proper labeling and stored in an upright position.
- B. Cylinders must remain secured to a wall, permanent fixture or an approved cart at all times.
- C. One additional cylinder may be stored in a lab adjacent to the cylinder it will replace.
- D. Empty cylinders shall be marked as empty and removed at next scheduled pickup.
- E. Cylinders must not block exit routes from the lab or building.
- F. Propane cylinders larger than 1 lb. shall be stored outside laboratory buildings.
- G. Regulators must remain unobstructed.
- Chemicals shall be separated and segregated by hazard class (acids, bases, flammables, etc.) to prevent hazardous reactions.
- Spray painting operations shall occur inside an approved paint spray booth.
- Place used oily/solvent soaked rags in a metal container with a lid and manage as hazardous waste.

### **Hazardous Waste:**

- A. Do not combine or mix chemicals unless an evaluation for chemical compatibility has occurred.
- B. Label all chemical waste containers with the words "Hazardous Waste" and list the names of the chemicals within the container.
- C. Segregate hazardous wastes by hazard class.
- D. All hazardous waste containers must be kept closed unless you are adding or removing waste from the container.
- E. Contact EH&S when waste containers are full to avoid exceeding the maximum allowable quantity within the Satellite Accumulation Area (SAA).
- F. Consult USF Hazardous Waste Management Procedure for additional information. (<u>USF Hazardous Waste Management Procedure</u>)
- G. Hazardous waste containers, labels, and pick-up request tags can be obtained through the EH&S office. You can request for any of these items through USF's chemical inventory system or by contacting the EH&S office at 813-974-4036.

# **EVENTS**

# **Definitions:**

**Event**: A scheduled activity open for the public to attend or participate including but not limited to exhibitions, expositions, fairs, festivals, entertainment, cause-related, fundraising, leisure activity. An activity that is advertised to the public by any communication means including social media that is not limited to the USF community is considered an event. An event may be a one-time or periodic, free or ticketed, educational, charitable or communication related hosted to attract revenue, support, awareness, and/or provide entertainment created by and/or for the public that will require review to ensure appropriate allocation of university business, resources, and personnel as required for the safe operation

and mission of the university. (Note: The applicable requirements of this manual extend to student "events"/activities that are not open for the public or advertised to the public)

**Prohibited Events**: Any activity which presents an unacceptable risk of harm to persons, the environment, or in defacement or damage to public or private property. This may include, but is not limited to, bonfires, use of firearms, explosives or munitions; motor vehicle races; events with an environmental impact (e.g., powdered color runs).

**Student organization**: A student group officially recognized by USF (Please see USF 6.017: Student Organizations).

**Student Sponsored**: To be considered Student Sponsored, an event, person or group ("group") must be invited on to campus by a student organization. The Student

Organization and group must mutually understand that members of the Student Organization will be actively involved, present at all times, and will be responsible for related actions and financial obligations.

# **Sponsor Responsibilities:**

Event sponsors have primary responsibility for the health and safety of:

- 1. Event workers/volunteers
- 2. Members of the public and all event attendees
- 3. Contractors/vendors hired to work at the event
- 4. University community in the vicinity
- 5. University property and assets

An event sponsor has a duty to plan, manage and monitor the event to ensure that workers and the visiting public are not exposed to undue health and safety risks.

# Fireworks:

Pyrotechnics and special effects displays on University Property are considered for approval on a case-by-case basis. Advance approval is required from the Office of State Fire Marshal (SFM), USF Environmental Health and Safety (EH&S), and the appropriate University Department or Facility Manager overseeing the proposed area. Only select locations are considered at the discretion of the authorities above. Discharge or trajectory of any device over an audience, campus building, environmentally sensitive zone, or occupied parking area is strictly prohibited.

# A. Roles and responsibilities

- 1. EH&S and the State Fire Marshal shall provide supervision and guidance to fireworks operators prior to setting up the display, during discharge of the fireworks, and after discharge to assist in a determination that the launch area is safe.
- 2. EH&S, University Police and the State Fire Marshal are authorized to suspend or terminate a firework display or pyrotechnic effects production when it is a safety hazard or risk to students, employees, visitors, or property.

 Organizations, groups, and individuals sponsoring outdoor public displays of fireworks, or interior pyrotechnics displays associated with theatrical or entertainment productions shall comply with these procedures and all applicable federal, state, and local requirements.

# **B.** General considerations

- 1. Only select locations are considered. Please verify with EH&S office in advance of your requested location(s) availability for pyrotechnic accommodations.
- 2. All proposed effects shall be restricted as deemed in the best interest of safety by the permitting authority. The items within this document are identified with limitations as noted, additional effects may be included as needed during the review process.
- 3. The <u>Pyrotechnics Permit Application</u> for the Use of Pyrotechnic Displays must be submitted to USF EH&S by the pyrotechnics vendor not less than thirty (30) calendar days in advance of the event. Minimum effect descriptions and required attachments are as outlined in the Application.
- 4. The event sponsor shall also complete and submit the Event Request form to be circulated separately but is to clearly indicate the extent of pyrotechnics proposed for the location. This event approval will be noted as contingent upon successful completion of the Pyrotechnics Permit process.
- 5. Verification of insurance is required and shall be submitted prior to the event. Applicant is to provide proof of General Liability Insurance for the pyrotechnics display in an amount not less than \$1,000,000 per occurrence. USF, The USF Board of Trustees, The Florida Division of State Fire Marshal Bureau of Fire Prevention, and the State of Florida shall be listed as additionally insured but other entities and individual facility management companies may also be shown as needed or requested.
- 6. A pyrotechnics fire watch as described herein is to be provided by the facility management. A copy of the approved application and show features will be forwarded to the individual for their reference at the time of the event.
- 7. Where a demonstration of an effect is requested by the State Fire Marshal, such demonstration shall be arranged in advance to be scheduled from **8 AM- 5 PM Monday through Friday** in the event facility. Items which cannot be accommodated within these parameters will be subject to deletion from the event request.
- 8. Environmental Health and Safety and University Police reserve the right to disapprove any event or effect at any time, even if previously approved due to circumstances that create a hazard. The vendor will be notified as quickly as possible should any problems become apparent.

# C. Indoor displays

1. Indoor displays will often require temporary modification to the building detection and alarm systems. When this is necessary a fire alarm trained technician will be required to be on standby at the fire alarm panel to oversee its operation and return it to normal when the show is completed. Maintenance and facilities or a contracted fire alarm vendor as designated is typically employed for this service. Requests for facilities service must be submitted 10 days prior to event. A fire watch (below) is also required. All costs associated with these services to be included in the event.

- 2. **Prohibited Indoors Comets.** A pellet of composition which is propelled from a mortar or shell and produces a long-tailed effect.
  - **Large Waterfalls -** Effects such as multiple gerbs suspended overhead, in close proximity discharging down for a cascading waterfall appearance.
- 3. **Restricted Indoors Propane Flame Effects** allowed with location and discharge heights limited for approved clearances. **All effects** must be arranged to stay within the stage area boundary and maintain heights below overhead structures with a minimum clearance of at least 20'.
- 4. All scenery and clothing for persons on or near stage at the time of effect are required to be fire retardant. No glowing or flaming particles are to be within 10' of the audience or stage personnel unless prior arrangements have been made specifically for certain performers. Each device shall be at least 15' from the audience or 2X the fallout radius, whichever is greater. A minimum of 25' is to be provided to all concussion mortars. Confetti cannons shall not be arranged to discharge in the vicinity of pyrotechnic effects.
- 5. Pyrotechnic materials will not be permitted to be stored on-site overnight and must be delivered, secured and monitored by the display vendor on an as needed basis for each show day. Only the amount for each show shall be placed at the point of use inside the facility at a time. No other storage inside the facility is allowed unless approved in advance on the application. Provide suitable secured safety containers for all materials with sufficient staffing provided for all locations.
- 6. The pyrotechnics vendor is required to provide all necessary safety equipment such as magazines, secured containers and fire extinguishers to protect the materials while on site. A minimum of 2 ABC dry chemical and 2 water H20 extinguishers are required per event with additional provided as indicated on the application or as needed to cover remote staging areas, the pre-show preparation area, and the display site during the show. Failure to have properly tagged and charged units for the event will void the approved application. The University does not provide fire extinguishers for Venue use. Unauthorized relocation or tampering with building fire extinguishers is a felony.

# D. Outdoor displays

- 1. All outdoors displays will require two permits.
- 2. Firework vendor(s) shall obtain a permit from City in which display will occur (e.g., Tampa Fire Rescue, St. Pete Fire Rescue) and provide a copy of the permit documents to EH&S.
- 3. Firework vendor (s) must also obtain a permit from EH&S / State Fire Marshal.
- 4. Firework vendor(s) shall meet all conditions within this procedure for outdoor displays.

# E. Fire watch for displays

- 1. Where a fire watch is required a minimum of one (1) independent person with adequate training in pyrotechnics oversight, emergency communications, and fire extinguisher operation shall be provided and pre-approved by the State Fire Marshal.
- The pyrotechnics fire watch personnel's only duty shall be to oversee the pyrotechnics display and watch for fire or other emergencies that could result in harm to persons or damage to property.

- 3. Shows with multiple effect control points will require additional fire watch staff and must be indicated at the time of permit application/approval.
- 4. The fire watch person will ensure that the effects are brought in, arranged, set up, and discharged in a safe manner in accordance with the approved permit.
- 5. The fire watch person shall have the authority to instruct the pyrotechnics vendor to modify or cease use of the effects if they determine a hazard exists. Failure of the vendor's representative to comply with fire watch personnel's request may result in disapproval of future permits.
- 6. The fire watch person shall have the authority to initiate building evacuation.
- 7. The fire watch person should also be familiar with the facility, location of the fire alarm system panel and controls, location of fire extinguishers, and have means of contacting emergency forces.
- 8. All costs associated with fire watch expenses to be the responsibility of the facility management, sponsoring department or venue.
- 9. Potential fire watch candidates to contact and\or submit a list of qualifications to the SFM for review in advance of the event.
- 10. Random use of fireworks or pyrotechnic effects is prohibited on property controlled by USF.

# Tents:

- 1. All tents shall meet the requirements of NFPA 102, Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures.
- 2. Cooking or smoking is prohibited under any tent.
- 3. No staking allowed in the set-up of tents.
- 4. All tents/booths shall be spaced a minimum of 10 feet apart from other tents.
- 5. Tents larger than 144 sq. ft. (12'x12') will require a permit from USF's EH&S Building Code Administration department for tent installation and inspections that must occur prior to performance and occupancy. These tents shall have a current certificate of flame retardant on the tent with a copy sent to EH&S.
- Containers for liquefied petroleum gases shall be installed not less than 60 inches (1,525 mm) from any tent and shall be in accordance with the provisions of NFPA 58, Liquefied Petroleum Gas Code.
- Portable fire-extinguishing equipment of approved types shall be furnished and maintained in tents in such quantity and in such locations as determined by the size of the tent.

# Food trucks:

- Cooking equipment used in fixed, mobile, or temporary concessions, such as trucks, buses, trailers, pavilions, or any form of roofed enclosure, shall comply with NFPA 96 Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations.
- 2. Cooking equipment used in processes producing smoke or grease-laden vapors shall be equipped with an exhaust system that complies with all the equipment and performance requirements of NFPA 96.

- 3. Cooking equipment that produces grease-laden vapors shall have protection supplied by fire-extinguishing equipment. Fire extinguishing systems must be current with certification within the last 6 months.
- 4. Food trucks must not park or block paved fire lanes adjacent to permanent buildings.

# **FIRE EXTINGUISHERS**

- Fire is a chemical reaction called combustion. Fire needs fuel, oxygen, heat and chemical chain
  reaction in order to burn. Fire extinguishers apply an agent that will cool burning heat, smother
  fuel or remove oxygen so the fire will not continue to burn. Small fires are quickly controlled by
  a portable fire extinguisher and individual(s) properly trained in their use.
- Fire extinguishers are located throughout every building on campus. To properly use an extinguisher, you must first be familiar with the type of fire extinguisher, its rating (i.e., classification) and how it operates.

# Fire classifications:





Fires involving the ordinary combustible materials such as wood, cloth, paper, plastics etc.



Fires involving combustible or flammable liquids such as gasoline, kerosene and oils.



Fires involving energized electrical equipment such as appliances of all kinds, motors, computers etc.

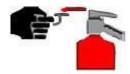


Fires involving combustible metals such as sodium, lithium, titanium, magnesium.

# How to use a portable fire extinguisher:

The easiest way to remember how to use a portable fire extinguisher is to use the acronym.





**Pull** the safety pin.



**Squeeze** the trigger while holding the extinguisher upright.



**Sweep** the extinguisher from side to side, covering all areas of the fire with extinguishing agent.

# Fire extinguisher types:

# 2½ Gallon Pressurized Water





# Carbon Dioxide (CO2)





# **Multi-Purpose Dry Chemical**





# Fire Extinguisher Tips:

- A. Always know the location of the nearest operable extinguisher and how to use it.
- B. Before using the fire extinguisher, evacuate the building by pulling the manual fire alarm pull station to alert other occupants of the facility. (Located near exits and stairs)
- C. If a fire alarm pull station is not available, yell or scream out loud "fire, fire, fire".
- D. Call 9-1-1 for University Police or have someone else call.
- E. Only attempt to extinguish small fires, if one extinguisher does not extinguish the fire, evacuate the area immediately.
- F. While fighting the fire, position yourself between the exit and the fire by keeping your back to the exit so you can immediately leave the area.
- G. After an extinguisher is used, contact EH&S to have it serviced or replaced.

# **FIRE REPORTING**

- All fires regardless of size and damage must be reported to University Police by dialing 9-1-1.
- University Police will notify EH&S and Tampa Fire Rescue. EH&S will notify the State Fire Marshal to investigate origin and cause of fire.

# **GENERAL FIRE SAFETY REQUIREMENTS**

- All stairwells, exits, and corridors shall be kept free of all obstructions at all times. No
  furnishings, decorations, other combustible objects or flammable material shall obstruct exits.
  Corridors and other portions of the means of egress are required to maintain a certain width so
  that the expected numbers of people can exit quickly in a fire situation. Any time obstructions
  exist, the possibility of people becoming trapped or slowed down in a fire increase. The prime
  function of corridors is to allow people to escape during a fire and these areas should not
  become contribute to fire origination or growth. This can very easily happen if combustibles are
  stored and allowed to accumulate within.
- Flammable and combustible liquids should be present in work areas only in quantities required for the day's activities and must be placed in an approved storage area/locker at the end of

each workday. Labs, industrial areas, warehouses and other occupancies all have their own requirements and exceptions. Contact EH&S for specifics for your area.

Fire doors shall remain closed at all times. The exception to this requirement is the doors have magnetic hold open devices that will release the door upon activation of the fire alarm system. If you are unsure if a door in your area is a rated fire door, please contact EH&S office. Generally, every stairwell door is a fire rated door since it is part of the "protected path of egress" for building occupants. Do not prop or wedge open any of these doors for the sake of convenience. Please contact maintenance or facilities for repair of broken closers or latches that prevent the fire door from securing.

- Do not physically obstruct or block from view fire extinguishers, fire alarm pull stations, standpipe hose outlets or electrical shut off locations. Do not block or hang anything from sprinkler heads. To obtain proper distribution of water, a minimum of 18 inches of clear space is required below sprinkler deflectors. Remember, tampering with fire protection equipment is a felony.
- Storage heights in buildings not equipped with a fire sprinkler system shall be a minimum of two (2) feet below the ceiling.
- Fire lanes shall be free and clear of storage, debris and parked vehicles. Trees located near fire lanes shall provide a minimum clearance height of 13 feet 6 inches for fire truck access.
- Open Flames such as candles, sterno cans, food warmers, or any alcohol- burning equipment used in warming food is strictly prohibited by the authority having jurisdiction.

# **ELECTRICAL SAFETY**

- Most electrical fires occur due to misuse and poor maintenance of electrical appliances, or overloaded circuits and extension cords.
- Routinely check your electrical appliances and wiring. Frayed wires can cause fires. Replace all worn, old or damaged appliance cords immediately.
- Don't overload extension cords. Do not plug multiple extension cords into another (daisy chaining).
- Know the capacity of the multi strip outlet. Make sure the amperage of the appliances plugged in, do not exceed the rating. Best to use a circuit breaker protected multiple outlet strip.
- Extension cords are for temporary use only and when a flexible, temporary connection is
  necessary. Never tie, tack, staple, fasten or run through ceilings or walls or pass through
  doorways, run under rugs or use as permanent wiring. When there is a permanent need for
  electrical outlets perform a survey on projected number needed in the building and complete a
  space impact form.

- Keep electrical appliances away from wet floors and counters; pay special care to electrical appliances in the bathroom and kitchen.
- When buying electrical appliances look for products which meet the Underwriter's Laboratory (UL) standard for safety.
- If an appliance has a three-prong plug, use it only in a three-slot outlet.

Never overload wall sockets. Immediately shut off and then have replaced outlets and switches that are hot to the touch.

• Never leave coffee makers and all other appliances with exposed heating elements unattended while in operation. They should be unplugged after each use and stored only after they are cool enough to touch.

# **Power outage**

A. The following actions shall take place when the electrical supply to the building is down:

- 1. Maintenance or facilities will determine the projected length of power failure.
- 2. Cease all major activities and prepare to evacuate building if power will be off for greater than 90 minutes. Exception, EH&S will make a determination for buildings with fire and life safety systems supplied by generator power.
- 3. Maintenance or facilities shall ensure fire alarm and emergency lights are operational for continued occupancy.
- 4. If fire or life safety systems become inoperable, initiation of a fire watch will occur and remain in place until restoration of power or building cleared of all occupants.

Determination of the evacuation of a building after a power outage is determined on a caseby-case basis and is based on numerous factors with the safety and health of occupants being the top priority.

Consult USF's Power Outage Evacuation Procedure for additional information specific to USF's Tampa Campus (USF Tampa Campus Power Outage Evacuation Procedure).

# **SPACE HEATERS**

Space heaters are not recommended appliances for use within USF buildings. Consult your facilities department to have your temperature adjusted in your area. However, if a space heater is used, the following guidelines must be followed:

- A. The heater must have an automatic safety switch that turns the unit off when tipped over.
- B. Units shall possess Underwriter Laboratory or other testing agency listing or label.

- C. Before using the heater, inspect the electrical cord. Look for frayed wire or cracked insulation. If there are any defects in the cord or unit, DO NOT USE. Plug heaters directly into a wall electrical outlet. Never use an extension cord with the heater.
- D. Never leave the unit on while you are out of your office. Always check to ensure unit is off before leaving your office for lunch or at the end of the day.
- E. Do not place the heater near combustible materials such as papers, magazines or office furniture. Allow at least three feet clearance between the heater and combustible material.
- F. Do not place the heater in or near wet areas or in high traffic areas such as exits. G. Before operating the heater, always read and follow the manufacturer's operating instructions.
- H. NEVER USE SPACE HEATERS IN AN AREA WHERE FLAMMABLE VAPORS MAY BE PRESENT.

# **COMMON FIRE VIOLATIONS**

- Extension cord used as permanent wiring device. (Extension cords are for temporary use)
- Daisy Chain assemblies (plugging a power strip into another power strip).

Blocked Exits.

- Furnishing and debris blocking egress.
- Excessive storage.
- Unsecured compressed gas cylinders.
- Improper storage of flammable liquids.
- Storage within 18 inches of ceiling in areas equipped with sprinkler heads (24 inches for ceilings without sprinklers).
- Propping open fire rated egress doors with a door wedge or other material.
- Unapproved portable space heaters not equipped with proper safety function. (Usually found under desks).

# FIRE AND EMERGENCY EVACUATION DRILLS

Fire and emergency evacuation drills are required annually in all USF high hazard buildings
(buildings with fire alarms) in accordance with the Florida Fire Prevention Code, Florida Statutes
and <u>USF Policy #6-025 - USF Fire and Emergency Evacuation Drills</u>. The purpose of the fire drill
is to educate occupants on proper actions to take in the event of an actual fire or other building
emergency. During a drill, all occupants must evacuate the building and the drill evaluated for
effectiveness.

- In the event of fire alarm activation in your building, please leave the building immediately by
  way of the nearest exit. If you cannot evacuate due to a disability, move to the nearest area of
  refuge/rescue (typically a stairwell landing).
- At times an unscheduled fire alarm evacuation or an actual fire incident may act as an official
  drill. This determination will be made by EH&S and if approved, a copy of the Fire/Evacuation
  Drill Form must be filled out by responsible staff, present at the event.

# **Evacuation Drill Roles and Responsibilities**

# **Environmental Health and Safety (EH&S)**

- 1. Provides primary oversight for the fire and emergency evacuation drill program for USF campus locations.
- 2. Maintains and updates USF campus location policies and procedures related to building Fire and Emergency Evacuation drills with assistance from other stakeholders.
- 3. Communicates policy and procedure changes to the USF community. Identifies high hazard buildings requiring annual fire and emergency evacuation drills.
- 4. Coordinates scheduling of evacuation drills with Facility/Safety Liaison and other stakeholders.
- 5. Provides training and guidance regarding fire and emergency evacuation drill procedures including identification of areas of refuge/rescue for occupants with disabilities.
- 6. Provides oversight of evacuation drill and help with clearing of building. Releases building for reentry at the conclusion of a drill.
- 7. Provides recommendations for improving drill efficiency.
- 8. Maintains fire and emergency evacuation drill evaluation records for inspection by State Fire Marshal's Office.

# Police / Security / Campus Safety Office

- 1. Attends fire and emergency evacuation drills.
- 2. Provides security and ensures safety of participants during evacuation drills. Assists with uncooperative participants.
- 3. Provides communication with emergency responders in the event of an actual emergency.

# Physical Plant / Facilities / Building Maintenance

- 1. Attends fire and emergency evacuation drills.
- 2. Operates fire alarm panel, i.e. resetting panel and manual station to normal operation.
- 3. Identifies building alarm system deficiencies with assistance from drill participants and makes corrections, if required. Resets alarm system at the conclusion of drill.

# **College or Division Head**

1. Designates a Facility/Safety Liaison and alternate who will assist in evacuation planning and scheduling for each applicable building within the college, division, or unit.

2. Ensures that individuals within the college, division, or unit are informed of policy requirements and comply with those requirements.

# College or Division, Facility/Safety Liaison

- 1. Coordinates drill schedule to ensure there is no disruption to major events (e.g. midterms, finals, conferences, etc.)
- 2. Schedules appropriate date and time for fire and emergency evacuation drill normally during first two weeks of the Spring or Fall Semesters.
- 3. Coordinates fire and emergency evacuation drill with EH&S, UPD, and Physical Plant.
- 4. Enlists building volunteers to monitor and encourage occupants to evacuate during the drill. At the specified time, activates fire alarm system for the fire and emergency evacuation drill to commence.
- 5. Designates gathering areas for building occupants in consultation with EH&S, usually a minimum of 150 feet away from the building.
- 6. Where practicable, maintains a record of staff or students that may require assistance during an evacuation and assists in identifying safe areas for persons with disabilities.
- 7. Receives comments from building occupants regarding drill procedures and fire alarm system deficiencies.
- 8. Completes <u>Fire/Evacuation Drill Evaluation Form</u> and maintains copy for file. Provides EH&S with a copy of the completed Fire/Evacuation Drill Evaluation form.

# **Building Occupants**

1. Immediately evacuate when the fire alarm activates via the nearest exit, or to the area of rescue/ refuge if one cannot evacuate due to a disability.

# Consequences

- 1. The consequences for violation of the fire and emergency evacuation drills policy include but are not limited to:
  - A. Students in violation of this policy may be referred to the Office of Student Rights and Responsibilities (formerly Student Judicial Affairs) for disciplinary action in accordance with student disciplinary procedures.
  - B. Staff and administration violators may be referred to their immediate supervisor. Faculty violators may be referred to their chair or appropriate unit head. In addition, all other Human Resources policies will apply. C. Non-University violators may be referred to University Police.

# **Fire and Emergency Evacuation Drill Procedures**

- A. Immediately evacuate the building via the nearest exit when the fire alarm is activated.
- B. If unable to evacuate due to a disability, shelter in the area of rescue / refuge, typically a stairwell landing, and wait for assistance from drill volunteers or emergency responders.
- C. Instruct visitors and students to evacuate and assist them in locating the nearest exit.
- D. Do not use elevators to exit the building during an evacuation as they may become inoperable.
- E. Carry only those personal belongings that are within the immediate vicinity.

- F. Close doors to limit the potential spread of smoke and fire.
- G. Terminate all hazardous operations and power off equipment.
- H. Close all hazardous materials containers.
- I. Remain outside of the building until the building is released for reentry.
- J. Do not restrict or impede the evacuation.
- K. Convene in the designated grassy gathering area and await instruction from emergency responders or drill volunteers. Avoid parking lots.
- L. Report fire alarm deficiencies, (e.g., trouble hearing the alarm) to facilities personnel for repair.
- M. Notify evacuation drill volunteers or emergency responders of persons sheltering in the areas of rescue/ refuge.
- N. Never assume that an alarm is a "false alarm".
- O. Treat all fire alarm activations as emergencies. Get out of the building!

# FIRE SAFETY EDUCATION AND TRAINING

- Training the University community is a vital component of the fire safety program. This section
  will cover address fire and life safety topics and should serve as a resource for all faculty, staff
  and students.
- The goal of EH&S is to educate the University community in the following areas:
  - A. Fire prevention and safety measures.
  - B. Proper use of fire equipment.
  - C. Detection and reporting of fire and safety hazards.
  - D. Fire drill and emergency evacuation procedures.
  - E. To schedule training, please contact the EH&S office at (813) 974-4036.

# **FIRE SAFETY EQUIPMENT**

- Modern buildings today are equipped with fire detection and suppression equipment to protect life and property from fire. The fire safety systems include fire sprinkler systems, standpipe systems, point addressable fire alarm systems and special clean agent automatic suppression systems.
- USF maintains the fire safety systems in accordance with applicable National Fire Protection Association (NFPA) standards for service and maintenance.
- Any fire protection or life-safety system out of service for four (4) hours or more in a twentyfour (24) hour period shall have a fire watch performed in the building or the building shall be evacuated.

# Fire watch

1. Fire watch is a patrol of any building or building area having an impaired fire protection system. The designated personnel conducting the fire watch shall watch for signs of

- fire that is, flames, smoke, burning odors, increased temperatures or other emergencies, i.e., water, gas leaks and power losses.
- 2. The fire watch personnel or any person shall sound an alert to other building occupants if fire, smoke or other noticeable signs of combustion or other emergencies requiring building evacuation are discovered and telephone 9-1-1 for emergency assistance.
- 3. Fire watch personnel must have the ability to telephone for emergency assistance from the local Fire Department by dialing 9-1-1.
- 4. Fire watch actions should be documented by using USF's EH&S Fire Watch Forms.
- 5. The frequency of fire watch patrols shall be continuous throughout all building areas; that is, continuous patrol through corridors, common areas, mechanical and storage rooms. Based upon level of risk, hourly patrols are considered minimum coverage.
- 6. All faculty and staff must be aware of possible hazardous conditions and shall not delay in reporting such conditions to fire watch patrol for notification to evacuate the facility and contact emergency services (fire department).
- 7. Physical Plant, facilities, and/or maintenance will use all available resources to restore inoperable fire protection systems to normal operating condition as quickly as possible.
- No fire protection or life safety system shall be placed permanently out of service unless prior written approval is obtained from the State Fire Marshal.
- The following are the types of systems installed in USF campus buildings and the required maintenance and service of the systems for compliance:

# **Fire Alarm Systems**

- 1. Fire alarm systems tested annually and have service tag attached to the main fire alarm control unit. Testing shall include all smoke detectors, manual pull devices, annunciator, visual indicators and strobes, control units, voice/alarm communications systems and other devices that are part of the fire alarm system.
- 2. Test shall include operation of all auxiliary functions such as: release of electronic locking devices, automatic fire and smoke door and damper function, elevator recall, stair pressurization operation and HVAC shutdown.
- 3. An approved fire alarm service company or a qualified USF employee shall test the fire alarm system. All testing and maintenance shall be in accordance with NFPA Standard 72, Fire Alarm Code.

# **Emergency Lighting Systems**

- 1. Functional test of emergency lighting shall occur monthly for not less than 30 seconds. This testing shall include emergency lighting systems that are part of an approved exit system, e.g., lighted exit signs, stairway lighting, and egress lighting, where required both inside and outside of a building or structure.
- 2. Functional testing shall be conducted annually for a minimum of 1 ½ hours (90 minutes) if the lighting system is battery powered.
- 3. The emergency lighting system shall be fully operational for the duration of the test.
- 4. A written record of monthly test shall be maintained.

# **Generator Systems**

- Generator sets in service shall be exercised at least once monthly, for a minimum of 30
  minutes by an authorized generator company or a qualified USF employee, using one of
  the following methods:
  - (1) Loading that maintains the minimum exhaust gas temperatures as recommended by the manufacturer.
  - (2) Under operating temperature conditions and at not less than 30 percent of the EPS standby nameplate rating.
- 2. An annual 'Load Test' for those generators that do not meet the requirements of NFPA 110: 8.4.2 shall be performed by an authorized generator company or a qualified USF employee. This Load test shall be performed under temperature conditions and at a capacity not less than 50 percent of the total connected emergency power supply load manufacturer's nameplate rating for the unit, for a continuous period of not less than 90 minutes.
- 3. Load test shall include building load with all required equipment on the emergency circuit(s) operational for the duration of the test. Elevator recall and firefighter control operations shall be checked, but need not be continuous for the test period
- 4. All testing must comply with manufacturer's guidelines and NFPA Standard 110
- 5. A written record of monthly test shall be maintained by the generator room or within the generator enclosure.

# **Fire and Smoke Dampers**

- 1. Each damper shall be tested and inspected one year (1) after installation.
- 2. The test and inspection frequency shall then be every four (4) years.
- 3. All documentation shall be maintained and made available for review by the AHJ.

# **Egress and Fire Doors**

- 1. Facility Management and or Maintenance will inspect and test annually all egress doors that swing in direction of egress travel and fire rated doors within USF buildings.
- 2. Standard fire doors and fire rated roll doors are included in this requirement that provide fire protection to openings in walls.
- 3. The inspection and test will cover hinges, catches, closers, latches, and rollers that are especially subject to wear.
- 4. The Facilities or Maintenance representative must sign a written record of the annual inspection and test and keep it on file for inspection by the State Fire Marshal.

# **HOT WORK**

Hot work operation is any that involves open flames or producing heat and/or sparks. This
includes but is not limited to welding and allied processes, hot mopping, heat treating, grinding,
thawing pipe, the use of power-driven fasteners, hot riveting and similar applications. These

operations create heat, sparks and hot slag that have the potential to ignite flammable and combustible materials in the area surrounding hot work activities.

- The Fire Prevention Code requires a permit for all hot work operations. OSHA requires contractors to initiate this permit for hot work and designate a permit-authorizing individual (PAI) to oversee hot work operations and to authorize hot work permits. The PAI cannot be the hot work operator (e.g., the person doing the work).
- EH&S issues <u>Hot Work Permits</u> for the University of South Florida. Anyone requiring a permit must make application forty-eight (48) hours before the start of work. A safety inspection of the work area prior to the start of work will be conducted by an EH&S representative.
- The permit shall be valid for a twenty-four (24) hour period and should be posted in the area of hot work for the duration of the activity.

# **DOCUMENTS**

The following documents provide additional information that will assist with Evacuation Drills and Events. Double click on the document to access the file:

- USF Fire and Emergency Evacuation Drill Policy
- <u>USF Fire and Emergency Evacuation Procedures</u>
- Fire/Evacuation Drill Evaluation Form
- Student Organization Event and Meeting Services Policies
- Student Event Management Policy
- Event Request Form
- Pyrotechnics Permit Application
- Hot Work Permit