

**University of Texas at San Antonio  
Office of Environmental Health, Safety and Risk Management**

**Fire and Life Safety Plan**

i. Review and Signature Page

This Fire and Life Safety Plan has been reviewed for regulatory compliance and best management practices by the undersigned individuals and is hereby adopted for use and compliance by all employees at The University of Texas at San Antonio.

PRINTED NAME	SIGNATURE	TITLE	DATE
J. Brian Moroney		Director, EHSRM	
John DeLaHunt		Risk and Life Safety Manager	

Reviewed: 11/01/2007

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### iii. EMERGENCY PROCEDURES

#### A) Reporting a Fire:

- 1) Contact San Antonio Fire Department, 911 (9-911 from a campus phone)
- 2) Contact UTSA Police Department dispatch, 458-4911 (x4911 from a campus phone)

#### B) Upon hearing a BUILDING EVACUATION ALARM (FIRE or other EVACUATION ALARM):

- 1) Take your keys and UTSA ID card with you. Take personal items (your backpack, briefcase, purse, etc.), if you have time.
- 2) Carefully, calmly exit via the closest fire exit route. DO NOT USE ELEVATORS.
- 3) If people cannot negotiate the exit, move them laterally away from any obvious danger to a marked Refuge Area, if one is available. Persons with disabilities, such as those who cannot walk or be assisted down the stairs, may elect to remain in the building.
- 4) Check each door for heat or hazard prior to opening. If your door feels hot or the exit path is hazardous, remain in the building.
- 5) Leave room door closed.
- 6) Report the status and location of anyone remaining in the building to campus responders (Police, Operations, Safety) and public officials (Police, Fire). Repeat this message often.
- 7) Stay together at a safe distance (50-100 yards, upwind) from the building until campus responders indicate you can return to the building.
- 8) If you remain in the building, whether because of disability or the exit path is hazardous:
  - a. Close the room door(s);
  - b. Put cloth at the bottom of the door;
  - c. Call 458-4911 (4911 from a campus phone), stay on the line and indicate your location; and
  - d. Try to be noticeable without opening windows or doors.

## CONTACT INFORMATION

For more information about this plan and its implementation, contact:

#### Primary:

John DeLaHunt  
Risk and Life Safety Manager  
SSB-B 1.104B  
210-458-4420  
john.delahunt@utsa.edu

#### Alternate:

Brian Moroney  
Director, EHSRM  
SSB-B 1.102  
210-458-5250  
brian.moroney@utsa.edu

## I. OVERVIEW

### A. Policy

It is the policy of The University of Texas at San Antonio to comply, in substantive and meaningful ways, with the requirements of the Authority Having Jurisdiction, and any applicable national and state fire and life safety standards.

### B. Authority Having Jurisdiction (AHJ)

In the context of fire and life safety codes, the authority having jurisdiction is an organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

#### 1. Role of the AHJ

- a. The AHJ is responsible for determining compliance with applicable codes and standards relating to fire and life safety.

#### 2. Primary AHJ

- a. Under Texas State Statutes, the Office of the State Fire Marshal, part of the Texas Department of Insurance, is the primary Authority Having Jurisdiction over state properties, including the University of Texas at San Antonio (UTSA).

#### 3. AHJ Designation

- a. By designation, the Director of the UTSA Environmental Health, Safety and Risk Management is the Authority Having Jurisdiction for all land and property owned, managed and/or leased by the University of Texas at San Antonio.

#### 4. Shared AHJ responsibility

- a. In cases where UTSA has leased property, the State Fire Marshal's designee shares responsibility as the Authority Having Jurisdiction with the local AHJ, often the San Antonio Fire Department.

### C. Compliance with External Standards

Laws in the State of Texas require compliance with applicable fire and life safety codes and standards.

#### 1. Applicable codes

- a. Applicable codes include, but are not limited to:
  - 1) NFPA 1 – Uniform Fire Code
  - 2) NFPA 10 – Portable Fire Extinguishers

- 3) NFPA 13 – Installation of Fire Sprinkler Systems
- 4) NFPA 25 – Water-Based Fire Protection Systems
- 5) NFPA 30 – Flammable and Combustible Liquids
- 6) NFPA 45 – Fire Protection in Laboratories
- 7) NFPA 72 – Fire Alarm Systems
- 8) NFPA 101 – Life Safety Code

#### D. Compliance with Texas Administrative Code

For the purposes of Texas Administrative Code, Title 28, Part 1, Chapter 34, Sections 34.521, 34.524, 34.623, 34.624, 34.721, and 34.722, written notification of system deficiencies shall be mailed to:

Director, Environmental Health, Safety and Risk Management  
University of Texas at San Antonio  
One UTSA Circle  
San Antonio, TX 78249

#### E. Inspections

Inspections and tours give external stakeholders the opportunity to verify that the University takes its responsibilities seriously. There are two major external stakeholders with vested interests in fire and life safety at UTSA.

1. State Fire Marshal's Office (SFMO)
  - a. Periodically, the SFMO inspects UTSA facilities for compliance with applicable codes.
  - b. Results of these inspections are action items for the campus as a whole.
2. Insurance carriers
  - a. Periodically, insurance carriers will tour campus and provide loss prevention and loss control recommendations.
  - b. Results of these tours are action items for the campus as a whole.
3. Internal inspections
  - a. UTSA will perform internal inspections as required to maintain compliance with external standards and conformance with expectations of external agencies.

F. San Antonio Fire Department (SAFD)

It is the policy of The University of Texas at San Antonio to provide emergency access to campus for SAFD fire response and Emergency Medical Services assets. It is the practice of The University of Texas at San Antonio to facilitate building familiarization tours for SAFD engine and hazmat companies annually.

## II. SCOPE AND APPLICATION

### A. Scope

This plan provides an operational outline of the measures UTSA will implement to create and maintain fire and life safety protection for students, faculty, staff, visitors and campus resources.

### B. Application

This Plan applies to all UTSA facilities, whether leased or owned, to all buildings and improvements on any land owned by UTSA regardless of management, and to any activities that occur on UTSA land, in UTSA facilities, or as a result of partial or total sponsorship of any UTSA department, agency or group.

### III. REVIEWS

#### A. Review Process

1. Review period
  - a. This plan shall be reviewed two years after initial issuance and every three years thereafter.
  - b. This plan shall be reviewed, as necessary, as part of any after-action report or events review which occurs following property damage, personal injury, workers compensation or loss of life due to fire and/or life safety factors.
  - c. This plan shall be reviewed when requested by the Associate Vice President for Administration, the Vice President for Business Affairs, and/or any member of the President's senior staff.
2. Review participation and leadership
  - a. Departments with operational responsibilities shall participate in the review.
  - b. UTSA Environmental Health, Safety and Risk Management shall lead the review process
  - c. Some campus and system agencies and departments shall have the option of participating in the review, though they do not have operational responsibilities under the plan. These agencies include:
    - 1) UTSA department of Internal Audit and Risk Management
    - 2) UTSA Staff Council
    - 3) UTSA Student Government Association
    - 4) UT System Office of Risk Management

## IV. RESPONSIBILITIES

### A. General Duty

All campus departments, staff, faculty and students have a general duty to create and maintain situations which meet the practical intent of the applicable external standards.

### B. Oversight

The UTSA Environmental Health, Safety and Risk Management department (EHSRM) provides primary oversight of this plan. Other campus and system departments provide operational support to this plan.

### C. Operational responsibilities

1. The Life Safety & Risk Management team in EHSRM provides primary responsibility for compliance with:
  - a. NFPA 1 – Uniform Fire Code
  - b. NFPA 10 – Portable Fire Extinguishers, including, but not limited to:
    - 1) Monthly inspections
    - 2) Annual inspections (by contract)
    - 3) Six-year hydrostatic testing (by contract)
  - c. NFPA 25 – Water-Based Fire Protection Systems, including, but not limited to:
    - 1) Inspections (directly and by contract)
    - 2) Investigation (directly)
    - 3) Periodic testing (by contract)
  - d. NFPA 101 – Life Safety Code, including, but not limited to:
    - 1) Egress audits (directly)
    - 2) Occupancy load calculations (directly)
2. The Life Safety & Risk Management team and the Lab Safety team in EHSRM share primary responsibility for compliance with:
  - a. NFPA 30 – Flammable and Combustible Liquids (as applied in laboratories and studios)
  - b. NFPA 45 – Fire Protection in Laboratories

3. The Life Safety & Risk Management team and the Environmental Protection & Construction team in EHSRM share primary responsibility for compliance with:
    - a. NFPA 30 – Flammable and Combustible Liquids (as applied on construction sites)
  4. The UT System Office of Facility Planning and Construction (OFCP) provides primary responsibility for new capital construction, including compliance with:
    - a. NFPA 13 – Installation of Fire Sprinkler Systems (by contract)
    - b. NFPA 72 – Fire Alarm Systems (installation, by contract)
  5. The UTSA Facilities Control Monitoring Systems (FCMS) team provides primary responsibility for compliance with:
    - a. NFPA 72 – Fire Alarm Systems (maintenance and testing)
- D. Management of External Inspections
1. EHSRM provides primary liaison with the SFMO and insurance carriers for external inspections
  2. EHSRM provides primary responsibility regarding results of external inspections and testing of fire suppression systems
  3. EHSRM and FCMS interact directly regarding results of external inspections of fire alarm systems

## V. ANNEXES

- A. Hot Work Permit
- B. General Prohibitions
- C. Egress and Exiting
- D. Storage
- E. Extension Cords and Temporary Power
- F. Multi-outlet Assemblies (Plug Strips)
- G. Electrical Devices
- H. Holiday Decorations
- I. Sprinkler System Impairment (in development)
- J. Commercial Kitchen Equipment (in development)
- K. Assembly Space and Classroom Occupancy Limits (in development)
- L. Fixed Clean Agent Suppression Systems (FM-200) (in development)

## Annex A

### Hot Work Permit Program

1. A Hot Work Permit must be acquired from the Office of Environmental Health Safety and Risk Management prior to performing any cutting, welding, or other related hot work at any of the UTSA campuses and/or satellite locations. This applies to all hot work, whether performed by UTSA personnel and/or independent contractors. (Exception: routine laboratory work involving use of Bunsen burners and/or other approved means of heat are regulated via the Laboratory Safety Program and therefore exempt from this program.)
2. Hot Work is defined as follows:
  - a. the use of any gas, electric arc, or flammable liquid, or any combination thereof, in the performance of welding or cutting
  - b. Any work utilizing a torch or other flame producing device, i.e. for heating and removing paint and floor tiles, heating and soldering pipes, etc.
  - c. use of a tool or equipment that may produce sparks; i.e. a grinder used to cut, de-burr, or polish metal
3. All hot work shall be performed in accordance with applicable OSHA requirements, NFPA 51B Standards, Uniform Fire Code, and other requirements established by the University of Texas System (UTS).
4. Fire extinguisher(s) shall be on-site at all times during the performance of hot work, and shall be kept well maintained and fully charged.
5. The Hot Work permit is a multi-copy form. [\(Copy of Hot Work Permit\)](#)
  - a. The personnel conducting the hot work will be given the “back” copy, which must be kept at the location of the hot work. When all hot work is complete, this copy must be signed by the individual responsible for the work and returned to the Construction Safety Coordinator.
  - b. The Construction Safety Coordinator will retain the other copies of this form.
6. Procedure for issuance of a Hot Work Permit:
  - a. For UTSA performed work, the Facilities personnel assigned to perform the work, or his supervisor, shall contact the Construction Safety Coordinator (or his/her designee) and provide details for the hot work; i.e. location, scheduling, and type of work.
  - b. For work being performed by a contractor, the Facilities Project Coordinator shall contact the Construction Safety Coordinator (or his/her designee) and provide details for the hot work; i.e. location, scheduling, and type of work.
  - c. The Construction Safety Coordinator (or his/her designee) will inspect the work area following the checklist included on the permit form. Additional safety requirements will be added if warranted, based on the site-specific conditions.

- d. UTSA personnel and contractors are responsible for requesting hot work permits in advance so as to provide EHSRM sufficient time to schedule the inspection of the site and issue the permit.
- e. Should unforeseen hot work become necessary and the Construction Safety Coordinator (or his designee) is not available, the Facilities Project Coordinator or maintenance shop supervisor may conduct the inspection and issue the permit, after acquiring permission from the Construction Safety Coordinator or his supervisor.

7. Permit Validity

- a. Hot Work permits will specify the location for which it is issued and may not be moved to another location without approval from EHSRM.
- b. Projects involving more than one level of an occupied building may require multiple permits, i.e. one for each level. This will be determined during the inspection of the site.
- c. Permits for most maintenance work will be issued for the one or two days that the work will entail.
- d. Long-term construction and maintenance projects
  - 1) For new and/or unoccupied buildings, permits may be issued for the duration of the project; however, all long-duration permits become invalid once UTSA personnel move into and occupy any portion of the building. A new permit must then be requested and issued.
  - 2) For existing occupied buildings, including tie-ins associated with a new building, permits may be issued for a maximum duration of 30 days. If the work is not complete, a new permit must then be requested and issued.

8. Compliance with all requirements established in this document shall be the responsibility of all personnel (UTSA and contractors) performing hot work at any UTSA facility.

## **Annex B**

### **General Prohibitions**

1. Except as authorized in writing by UTSA Environmental Health, Safety and Risk Management:
  - a. Candles and other open flames are prohibited in campus buildings and on campus grounds, including at special events.
  - b. Propane cylinders are prohibited in campus buildings and on campus grounds.
  - c. Upright, upward facing halogen lamps (halogen torchieres) are prohibited in campus buildings and on campus grounds.

## **Annex C**

### **Egress and Exiting**

1. All campus facilities shall conform to access to egress, means of egress and exiting requirements of current edition of the National Fire Protection Association Life Safety Code 101 (NFPA 101).
2. In addition to more detailed requirements in specific situations as determined by NFPA 101, the following general rules apply in all UTSA facilities:
  - a. At no time shall any individual's path of travel between their location in an area and the door leaving that area contain obstructions that reduce the width of that path below 18".
  - b. At no time shall any six individuals' path of travel between their location in an area and the door leaving that area contain obstructions that reduce the width of that path below 36".
  - c. At no time shall any hallway serving as an exit path contain obstructions that reduce the width of that path below 36" or the width of doors in the direction of exit, whichever is greater.
  - d. Hallways serving as exit paths may contain obstructions that reduce the width of that path below 44" only with written authorization of the Environmental Health, Safety and Risk Management Department.
3. Campus constituents shall not obstruct, whether by action or inaction, means of egress.
4. Building occupants shall prevent the accumulation of and ensure the prompt removal of, dangerous conditions in exit paths, such as obstructions, slip hazards, trip hazards, and hazardous materials. Failure to abide by this policy may result in removal of the obstructions at the expense of the occupants.
5. Occupants may not block doors serving as means of egress. Blocking other doors requires written authorization from the Environmental Health, Safety and Risk Management Department.
6. ESHRM and Facilities Services shall maintain exit signage, doors, door hardware, and exit door security devices.
7. At no time shall exit paths contain hazardous materials in storage.

## Annex D

### Material Storage and Furniture Placement

1. All storage of materials in campus facilities shall conform to the requirements of current edition of the National Fire Protection Association Life Safety Code 101 (NFPA 101).
2. In addition to more detailed requirements in specific situations as determined by NFPA 101, the following general rules apply in all UTSA facilities:
  - a. No occupant shall store material or place furniture within 18" of the plane of automatic fire sprinklers, such that the storage would interfere with the action of the sprinkler head(s).
    - 1) Storage against walls within 18" of the plane of automatic fire sprinklers is acceptable with written authorization of the Environmental Health, Safety and Risk Management Department.
    - 2) Furniture and artwork may attach directly to walls in such a way as to allow sprinkler system activation without obstruction.
  - b. No occupant shall hang materials from fixed fire suppression pipe, including sprinklers.
  - c. No occupant shall store materials such that they obstruct audio and/or visual fire alarm devices.
  - d. No occupant shall store materials or place furniture such that it obstructs access to portable fire extinguishers.
  - e. No occupant shall use a mechanical room for storage, except with written authorization from the Environmental Health, Safety and Risk Management Department.
  - f. No occupant shall store materials or place furniture within 36" of any electrical service panel.
  - g. No occupant shall store materials or place furniture in such a way as to block access to egress, means of egress, or exit.

## Annex E

### Extension Cords and Temporary Power

1. All use of temporary power and extension cords shall comply with requirements of current edition of the National Fire Protection Association Life Safety Code 101 (NFPA 101) and the National Electric Code (NEC).
2. In addition to more detailed requirements in specific situations as determined by NFPA 101 and the NEC, the following general rules apply in all UTSA facilities for all campus users of extension cords and multi-plug adapters (extension cords with multiple outlets, cube taps, un-fused multi-outlet assemblies, etc):
  - a. Unplug electrical devices from cords and taps at the end of each shift.
  - b. Unplug cords and taps from walls at the end of each work shift
  - c. Coil cords as if for storage at the end of each shift.
  - d. Verify that cords and adapters have a valid UL listing or FM approval.
  - e. Ensure that the current draw of the electrical devices does not exceed the ampacity (current rating) of the cords and adapters.
  - f. Protect the cords and adapters from environmental damage by placing them away from traffic and on top of rugs and carpets.
  - g. Remove cords and adapters from service when the outer insulation gets damaged. Do not repair extension cords and adapters.
  - h. Use only three-prong grounded extension cords and adapters.
  - i. Prevent the use of extension cords and multi-plug adapters with fused multi-outlet assemblies (fused power strips), except as provided in Annex F.
3. A licensed electrician, approved by the University, must supervise any temporary power installation.
4. Refer to Annex H for temporary power for holiday decorations.
5. Exceptions to this policy must have written authorization from Environmental Health, Safety and Risk Management.

## **Annex F**

### **Multi-outlet Assemblies (Plug Strips)**

1. All use of multi-outlet assemblies (plug strips) shall comply with requirements of current edition of the National Fire Protection Association Life Safety Code 101 (NFPA 101) and the National Electric Code (NEC).
2. In addition to more detailed requirements in specific situations as determined by NFPA 101 and the NEC, the following general rules apply in all UTSA facilities for all campus users of plug strips:
  - a. Plug strips must carry a UL listing or FM approval compatible with the type of service they will provide.
  - b. Plug strips must have fuse or breaker protection to protect building electric service from overload.
  - c. Plug strips must connect directly to walls, and electrical devices must connect directly to plug strips. UTSA policy prohibits connection of plug strips in series (“daisy-chaining”).
  - d. Plug strips must be visible to users. Concealing plug strips in furniture or wall assemblies reduces the opportunity to observe the device for visible defects.

## **Annex G**

### **Electrical Devices**

1. All use of electrical devices shall comply with requirements of current edition of the National Fire Protection Association Life Safety Code 101 (NFPA 101) and the National Electric Code (NEC).
2. In addition to more detailed requirements in specific situations as determined by NFPA 101 and the NEC, the following general rules apply in all UTSA facilities for all electrical devices:
  - a. Electrical devices shall be UL listed or FM approved for the purpose they serve at UTSA.
  - b. Cords of electrical devices shall be in good condition, free from damage to exterior insulation.
  - c. Electrical devices shall be grounded or double-insulated.
  - d. Use of electrical devices shall conform to manufacturer's instructions.
  - e. Power draw of electrical devices shall not exceed 80% of circuit capacity – generally 15 amps on a standard circuit.
3. Electrical devices with heating elements shall include an automatic shut-off.
4. Electric space heaters shall have tip-over detection, protected heating elements, automatic shut-off, and UL Listing and/or FM Approval.

## **Annex H**

### **Holiday Decorations**

1. All use of holiday decorations shall comply with requirements of current edition of the National Fire Protection Association Life Safety Code 101 (NFPA 101) and the National Electric Code (NEC).
2. In addition to more detailed requirements in specific situations as determined by NFPA 101 and the NEC, the following general rules apply in all UTSA facilities for all holiday decorations:
  - a. Holiday decorations shall not obstruct access to egress, means of egress or exits (see Annex B).
  - b. Building occupants shall not store or install holiday decorations such that they obstruct fire protection systems (see Annex C).
  - c. Building occupants shall not install holiday decorations more than four weeks in advance of the holiday.
  - d. Building occupants shall remove holiday decorations no more than two weeks following the holiday.
3. Electrical holiday decorations shall have current UL listing or FM approval, and shall be installed and used in accordance with manufacturers instructions.
4. Live (potted) and cut coniferous holiday decorations require written authorization from the Environmental Health, Safety Department. See Annex G.1 for additional requirements for cut coniferous holiday decorations.

## Annex H.1

### Improving Holiday Tree Fire Resistance<sup>1</sup>

1. Before you carry the holiday tree into campus buildings, use a saw to make a clean, straight cut an inch or two from the base of the trunk. Then use a sharp knife to remove the outer bark around the trunk for a few inches on all sides.
2. Mix your preservative:
  - a. Pour two gallons of hot water into a five-gallon container, then add:
  - b. 1 pint (16 oz.) of clear corn syrup
  - c. 4 oz. of liquid chlorine bleach
  - d. 2 oz. of kitchen vinegar
  - e. 1/2 tsp. of borax-based detergent or soap
  - f. 2 oz. of liquid delicate laundry detergent
3. Stir the ingredients and stand the trunk of the tree in the solution. It will take four to five days for the tree to absorb enough of the solution to be sufficiently fire resistant. Try to store the tree in a protected area (garage, patio or against a wall) to shelter it from wind so it doesn't tip over.
4. After four to five days, bring the tree indoors. Use a heavy-duty tree stand that will hold plenty of fluid. Move the tree to its display area, saw another inch off the bottom of the trunk, and fill the well of the tree stand with the fluid.
5. Check the reservoir every day or two and add more of the fluid as needed.

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<sup>1</sup> [http://findarticles.com/p/articles/mi\\_pnav/is\\_199312/ai\\_3477471984](http://findarticles.com/p/articles/mi_pnav/is_199312/ai_3477471984) (accessed 11/30/07)

**Annex I**  
**Sprinkler System Impairment**

**In Development**

**Annex J**  
**Commercial Kitchen Equipment**

**In Development**

## **Annex K**

### **Assembly Space and Classroom Occupancy Limits**

**In Development**

**Annex L**

**Fixed Clean Agent Suppression Systems (FM-200)**

**In Development**