Environmental Health & Safety

Fire Watch

UTK Environmental Health & Safety Procedure FS-011

This procedure outlines the guidelines for posting a fire watch.

Effective Date: 07/01/2010
Revision Date: 04/05/2016

Purpose, Applicability, and Scope

Purpose – This procedure outlines the guidelines for posting a fire watch.

Applicability – This procedure applies to all employees and students on the UTK campus.

Scope – This procedure will be followed when a fire detection or suppression system becomes impaired for >4 hours in a 24 hour period, when hot work is being conducted in a building, or it is essential for public safety in any place where people congregate, due to the number of persons, or the nature of the performance, exhibition, display, contest or activity, one or more qualified persons are to be employed to be on fire watch duty at such place.

Abbreviations and Definitions

Abbreviations

AhJ: Authority Having Jurisdiction
EHS: Environmental Health and Safety
SFMO: State Fire Marshal’s Office

Definitions

Fire Protection System: Approved devices, equipment, and systems or combination of systems used to detect a fire, activate an alarm, extinguish or control a fire, control or manage smoke, or products of a fire, or any combination thereof. Examples include: fire alarms, sprinklers, fire pumps, smoke detectors and fire extinguishers.
Fire Watch: The assignment of a person or persons to an area for the express purpose of notifying the fire department, the building occupants, or both of an emergency preventing a fire from occurring; extinguishing small fires; aiding in the calm egress of the occupants, or protecting the public from fire or life safety dangers. A fire watch allows buildings to be temporarily occupied when the fire suppression systems or the fire alarms are out of service. The assignment of a fire watch officer is required by the State of Tennessee Fire Marshall’s office.

Hot Work: Any work involving welding, brazing, soldering, heat treating, grinding, powder-actuated tools, hot riveting and all other similar applications producing a spark, flame, or heat, or similar operations that are capable of initiating fires or explosions.

Roles and Responsibilities

Employees and Outside Contractors (Fire Watch Officer) shall:

- Familiar with the building and have access to all areas of concern
- Be trained to identify fire hazards.
- Be knowledgeable as to how to initiate occupant notification, evacuation and fire department notification.
- Look for fire during patrol and make sure that other fire protection features of the building (such as egress routes and alarm systems) are available and functioning properly.
- Be trained in the use of fire extinguishers and have them readily available.
- Maintain a log of fire watch activities.

Supervisors shall:

- Ensure that protection is provided from the hazards of fire for persons and property.
- Assure that staff, equipment, training and procedures are adequate and in place at all times the fire watch is required.
- Assure that the fire watch officer shall have the skills and ability to perform prescribed duties and to meet all job qualifications.
- Contact the monitoring company or Facilities Services to fix the fire protection system(s).
- Maintain an up to date directory of contact names and information that is updated on a routine basis.
• Maintain copies of all fire watch reports.
• Notify the City of Knoxville Fire Department when an impairment in the fire protection system lasts >4 hours, or has been returned to service.
• Post signs when an impairment of the fire protection system has occurred.

EHS shall:
• Assist in training Fire Watch officers upon request.
• Revise the Fire Watch Procedure periodically

Outside Contractors shall:
• Notify Facilities Services when a fire protection system is impaired, either whole or partially.
• When hot work is being performed that requires a fire watch.
• Follow UTK’s fire watch procedure.

Procedures

Fire Watch Initiation
A building may be evacuated or an approved fire watch provided for all portions of a building or structure that:

• Lacks sufficient egress/exits or
• Contains a serious fire hazard
• When required by the State Fire Marshal’s Office (SFMO)
• Other major code deficiencies such as but not limited to the following:
  o Impaired fire protection equipment such as alarm, suppression, fire pumps
  o Condition of age or dilapidated condition, or from any other cause, is especially liable to fire, or constitutes other dangerous of defective conditions, and that is situated so as to endanger life or property. This may also include combustible or explosive matter or inflammable conditions dangerous to the safety of such buildings.
Personnel

A fire watch must include dedicated staffing, such as certified firefighters, trained security guard(s), or others subject to the approval of the SFMO to perform the watch. Fire watch officers must have the skills and ability to perform prescribed duties and to meet all job qualifications. Fire watch officers are not expected to perform fire-fighting duties beyond the scope of the ordinary citizen. The individuals performing the fire watch are not permitted to perform any other duties.

Identification

Fire watch officers must be provided with a means of identifying themselves as authorized representatives of fire loss prevention management. The method of identification shall be acceptable to the authority having jurisdiction.

Fitness for Duty

An on-duty fire watch officer shall not accept relief by another officer who is not in a condition to work. The on-duty fire watch officer shall ensure that the relief officer is fit for duty. It shall be the responsibility of management to determine fitness for duty for any fire watch officer.

Emergencies on Duty

Fire watch officers shall not leave their assigned areas except in an emergency. In such cases, they should notify their superiors or another officer as soon as practicable or send an appropriate signal to a constantly attended location, such as the UT Police Department or the City of Knoxville Fire Department.

Pre-Event Tour

A fire watch officer should conduct a tour before the fire watch to familiarize themselves with the building or area they are assigned.

Fire Watch: What to look for

While on duty, fire watch officers should pay particular attention to the following when conducting a fire watch inspection of the building:

- Fire alarm panel: Make sure there are no yellow or red lights, unless the system is impaired.
- Sprinkler system: all water flow control valves should be open, unless the system is impaired, and sprinkler heads should not be obstructed.
- Fire pump
- Hot Operations: if welding, torch cutting, heavy grinding or other hot work is being performed.
• Potential arson-accelerant; forced entry.
• Flammable Liquids: Must be in approved containers and in designated storage areas.
• Pull stations: the fire watch officer should know where these are located and how to activate.
• Fire extinguishers: fire watch officers should know the location of all portable extinguishers and how to use them. Fire extinguishers should only be used if safe to do so.
• Exits: fire watch officers should know where all exits are located and all exit doors should be accessible for use.
• Fire Doors: should be closed properly.

Out of Service Equipment

Fire protection systems (i.e. fire detection or suppression systems) that are impaired must be tagged out of service. Tags must be placed at the fire alarm panel, main sprinkler valve and the fire department connection.

Communication

Fire watch officers must be provided with a means of continuous communication (e.g. two way radios) with a constantly attended location. There may be some locations (i.e. basements) on campus where two-way radios may not work. Therefore, alternative arrangements need to be made in those circumstances. Cell phones, or landlines might be used instead, or a second person might be assigned to assist with communication.

Directory

A continuously updated directory of names, telephone numbers, and other information to assist in making emergency calls shall be kept at a fire watch control center. This directory shall include the telephone numbers of key management personnel to be notified in an emergency, such as fire, police, and emergency medical service departments, and other outside agencies needed in an emergency. In the absence of a fire watch control center, the directory should be kept in a location accessible to the fire watch officers.

Route

The route assigned to the areas of concern for the fire watch officer shall be designated by management and approved by the SFMO. Each tour shall include an inspection of the outside perimeter of the building. Particular attention should be given to new construction or alterations that may be in progress. During the tour, the fire watch personnel shall make a thorough inspection of the buildings or spaces including concealed areas, such as attics, unoccupied storage areas, etc.
Length of Patrol

Patrols of the facility are required every 15 minutes if the facility has people sleeping or is an occupied assembly facility. Otherwise, one complete tour of the building or area, no longer than one hour, shall be completed. If the tour cannot be completed in one hour by a single fire watch officer, additional fire watches shall be posted.

Report

Fire watch officers must complete a daily report identifying the fire watch staff on duty, the time(s) of patrol, any events or deficiencies discovered, and the corresponding resolution. The fire watch must be maintained the entire time the building is occupied or until the deficiencies are corrected.

If Fire Occurs

Alert Fire Department: A fire watch officer must notify the City of Knoxville Fire Department immediately in the event that a fire occurs.

Evacuate Occupants of the Building:

- If smoke or fire is detected, pull the nearest alarm.
- If safe, check rooms for occupants along the evacuation route.
- Evacuate to the assembly point.
- Remain on the scene to assist with the emergency.
- Keep people calm and together.
- Start a sign-in sheet at the assembly point
- Communicate with on-scene responders (fire department or police) regarding who may be left in the building, if there are any injuries and details about the incident.
- Keep others from approaching or entering the building until approval to re-enter has been provided by the police or fire department

Cancellation of Fire Watch

A fire watch can be cancelled only after the alarm deficiencies have been repaired, or ALL occupants have been relocated to another facility.
Hot Work

A fire watch may be required when hot work is being performed (see EHS Hot Work Policy FS 15 for more information). Potential situations that could exist which require a fire watch include:

Hot work is performed in a location where other than a minor fire might develop or where the following conditions exist:

Combustible materials in building construction or contents are closer than 35 ft to the point of hot work and can’t be shielded or covered.

Combustible materials are more than 35 ft away but are easily ignited by sparks.

Wall or floor openings are within 35 feet and expose combustible materials in adjacent areas. This includes combustible materials concealed in walls or floors.

Combustible materials are adjacent to the opposite side of partitions, walls, ceilings, or roofs and are likely to be ignited.

Record Keeping

All reports and records will be maintained by the department issuing the fire watch a minimum of three years.

Training

Site Specific Knowledge:

Management shall establish programs for fire watch officers to ensure they are familiar with the property being protected, including:

- All buildings, occupancies, and hazards
- Fixed fire protection systems
- Manual and automatic detection and alarm systems
- Portable fire protection equipment
- Emergency shutdown procedures and equipment for which they are responsible
- The facility emergency action plan
Emergency Procedures:

Management shall ensure that the fire watch officers are familiar with the procedures to follow in the recognition and reporting of an emergency, including the following:

- When and how to use radio equipment, telephone, and private or public alarm boxes to summon aid.
- How to notify the fire department, and other emergency response organizations.
- The personnel to be contacted in case of emergency.

Regulatory Drivers and References

NFPA 101 – 9.6.1.7 & 9.7.6
NFPA 51B
NFPA 72
International Fire Code §403.1; §901.7; §1404.5; §2404.20
Tennessee SFMO Fire Watch Procedures CE-410

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Appendices

FS-011 Fire Watch Procedure (downloadable pdf)
Appendix A: Fire Watch Log Form