Fire System Impairment Policy

Purpose:
To establish procedures to be followed, when a fire protection or suppression system is taken out of service, due to construction, alteration, power outage, repair, or any unforeseen conditions. These procedures, include measures taken during the impairment to ensure that increased risks are minimized and the duration of the impairment is limited. Procedures set forth in the policy also apply to routine scheduled maintenance or testing of the systems, as required by University Code and Standards Policy.

OVERVIEW
The possibility of a fire or other incendiary incident causing major damage to university property and occupants is increased whenever a fire protection and/or suppression system is impaired. The longer these systems are impaired, the greater the probability of fire becomes. Therefore, it is necessary to minimize the duration and scope of any impairment or provide alternate fire protection systems.

A Fire Protection Impairment Program is an effective management program used to:

- Supervise the safe shutdown or removal of service fire protection and/or suppression systems.
- Control potential fire hazards during the impairment.
- Restore the fire protection system to service as soon as possible.

SCOPE
This policy applies to all UIC employees, contractors, sub-contractors, representatives, or any company representative hired by UIC to provide services or any outside trade who will be working on UIC property.

DEFINITIONS

Fire Protection/Suppression Systems: Fire alarm, sprinkler, standpipes, fire hose stations, underground fire service mains, fire pumps, special extinguishing systems, fire doors that are connected to the fire alarm system, and hood and duct systems.

Fire watch: An Interim Life Safety Measure when a person or persons are designated to physically patrol the area where the fire protection system is impaired to monitor for signs of smoke and/or fire.

Impairment: A shutdown or interruption in either whole or part of a fire protection or suppression system.
**Emergency Impairment:** When a fire protection or suppression system is impaired due to an unexpected occurrence, such as a ruptured pipe, or damage to the alarm system.

**Planned Impairment:** When a fire protection or suppression system is impaired due to routine inspection, maintenance, or alteration of the systems. This includes construction, alteration, or hot works being performed that may affect the performance of the systems.

- **Level 1 Impairment:** A shutdown of the entire fire protection system, or major portion, significantly affecting the ability to properly protect the building and its occupants.

- **Level 2 Impairment:** When a limited number of components of a fire protection system are found defective or removed from service. A Level 2 impairment represents a minimal impact to the overall live safety of the building and its occupants.

**Impairment Manager (IM):** The person who manages the impairment while the system work is being performed, and has overall responsibility for proper implementations of the Fire System Impairment Policy. The Chief Engineer or their designee shall have the role of Impairment Manager.

**RESPONSIBILITIES**

**UIC Employees**

1. Any employee who impairs a fire protection system, in whole or part, must first notify the University Impairment Coordinator. If an impairment permit is required, they shall post a copy of the permit, at the controls to the systems that is impaired.

**Contractors, Outside Workers, Outside Company Representatives**

1. Any contractor/contractor’s representative or outside worker who wishes to impair a fire protection system, in whole or part, must first notify the Impairment Manager. An impairment permit is required, they shall post a copy of the permit, at the controls to the systems that is impaired. The outside contractor has a UIC contact that hired him. The UIC contact should inform the IM.

**Impairment Manager (IM)**

1. The IM will determine the level of impairment due to a shutdown, in whole or part, of a fire protection/suppression system.

2. The IM will be responsible for completion of the Impairment Worksheet when authorizing Level 1 impairments.
3. The IM will be responsible for issuing and verifying removal of the copy of the permit at the controls of the system(s) that were impaired.

4. The IM will facilitate the notification of responsible parties, including the UIH Director of Facility and Life Safety. Responsible parties are determined based on the level of impairment.

5. The IM will be responsible for coordination of the fire watch, if it has been determined that a fire watch is necessary. The IM will document the fire watch activities on the Fire Watch Log Sheet. The log shall be returned to the IM at the end of the fire watch, or at every calendar day, which shall be 8am to 8am. Once a fire watch is determined to be needed, the contractor or UIC trade is responsible for executing the fire watch.

6. The IM will provide training to UIC employees, contractor/contractor's representative or outside worker, who will be utilized as fire watch personnel.

7. A log of all system impairments shall be maintained by the IM.

IMPAIREMENT COORDINATION PROCEDURES – LEVEL 1

1. All level 1 impairments, both preplanned and emergency, must be reported to the impairment coordinator.

2. UIC Facilities Management will be notified of a preplanned impairment of a fire alarm system.

3. The UICPD dispatch will be notified at the beginning and end of the impairment to ensure the alarm is out of service and placed back in service at the end of the impairment.

4. The IM will ensure that level 1 impairments are satisfactorily repaired and the system is placed by in full service.

IMPAIREMENT COORDINATION PROCEDURES – LEVEL 2

Preplanned Impairments

1. UIC Facilities Management will be notified of a preplanned impairment of a fire alarm system.
2. The UICPD dispatch will be notified at the beginning and end of the impairment to ensure the alarm is out of service and placed back in service at the end of the impairment.

3. The responsible party for the affected building will be notified of the preplanned impairment.

4. The IM will complete the Impairment Worksheet.

5. The IM will complete the Fire & Life Safety System Impairment Permit. The IM will authorize the preplanned impairment and verify that the following procedures have been implemented:

   A. The extent and expected duration of the impairment have been documented.
   B. The areas or building(s) involved have been considered and increased risks determined.
   C. When the automatic sprinkler system is out of service for an period exceeding four hours, the IM will arrange for the following:
      i. A fire watch for all portions of the building left unprotected by the shutdown until the fire alarm or sprinkler system has been placed by in-service. A fire watch will be composed of individuals trained in the use of fire extinguishers and in notification of both the occupants and the fire department. When a contractor takes a room or two out of service, the workers can be considered the fire watch during the work day. They stay until the system is restored.
   D. When a required fire alarm system is out of service for an extended period, the IM will arrange for one of the following:
      i. Evacuation of the building or portion of the building affected by the system out of service, or
      ii. Implementation of mitigating measures for the period that the system is impaired. This considers the building occupancy type, nature and duration of impairment, building occupancy level duration of impairment period, active work being conducted on the fire alarm system, and is the system completely impaired or partially. Appropriate mitigating measures range from occupant notification to full-time fire watch.
E. Sprinkler systems: the IM will complete/authorize a Fire & Life Safety System Impairment Permit, making sure it is located at the fire department connection, and fire sprinkler controls, indicating which system, or part thereof, has been removed from service.

F. Fire alarm systems: the IM will complete or authorize a Fire & Life Safety System Impairment Permit, making sure it is located at the fire alarm annunciator and fire alarm control panel, indicating which system, or part thereof, has been removed from service.

Emergency Impairment Procedures

When an emergency impairment occurs, emergency action will be taken to minimize potential injury and damage.

1. The IM will implement items 1 – 6 only 5 of under the Preplanned Impairments with the following exception:

A. Any damage to the fire protection system caused by a contractor will be repaired by an Illinois State Licensed fire sprinkler company at the contractor’s expense. Any required fire watch activities due to damage to the fire protection/suppression systems will be supplied by the contractor. In addition, if hot work is required to complete the repairs the contractor will supply and additional fire watch for the hot work area, and obtain a hot work permit.

Placing the Systems Back In-service

When the impaired fire protection/suppression equipment is restored to normal service, the IC will verify that the following procedures have been followed:

1. Any necessary inspections and test have been conducted to verify that affected systems are fully operational.

2. Maintenance supervisors for the affected building(s) have been advised that fire protection/suppression is restored.

3. UICPD dispatch shall be advised to resume monitoring the alarm.

4. The Fire & Life Safety Impairment Permit has been removed.
NOTICE!
The Fire Alarm, Sprinkler System, Or Fire Pump Is Out of Service Due to Repairs Being Performed

Circle All That Apply and Place a Copy by Affected System