Fire System Impairment Process

- Requesting organization will request Impairment Coordinator of needed impairment.
- Impairment Coordinator will engage EHS to assist in performing a risk assessment.
- Impairment Coordinator will inspect the building area and perform Risk Assessment.
- Impairment Coordinator will notify the Golden Fire Department of the outage.
- Impairment Coordinator will notify insurance carrier.
- Requesting organization ensures the necessary tools, equipment are on site and everyone is ready to proceed with the outage.
- Proceed with taking the system off line and perform work.
- Perform necessary inspections and tests to verify the affected system is operational.
- Requesting organization will notify the monitoring company, building occupants, and impairment coordinator that protection has been restored.

Requesting Organizations:
- Facilities Management (FM)
- Office of Design and Construction (ODC)

Scope: The Fire System Impairment process defined in this document does not apply to taking single points on the detection system offline for hot work or maintenance activities.

Impairment Coordinators:
- Bob Slavik – FM (Primary) rwslavik@mines.edu; 303-273-3312; 303-885-8557
- Ray Castillo – FM (Backup) rcastillo@mines.edu; 303-273-3263; 720-496-7782
- Craig Crow – FM (Backup) ccrow@mines.edu; 303-273-3356; 303-421-0832

Standard Occupant Restrictions for Laboratory Buildings

- No Open Flame or Flammable Research Work in the Building.
- No Bunsen burners
- No welding, cutting, or spark producing work such as grinding
- No work with pyrophorics, water reactives or explosives
- No flowing of flammable gases or producing exothermic reactions
- Heat producing experiments must be attended.

Standard Occupant Restrictions for Non-Laboratory Buildings

- No hot work, this includes:
  - No spark
  - No welding, cutting, brazing, soldering
  - No spark producing activities such as grinding

Fire Watch Requirements

The person performing the fire watch must perform constant patrols of the affected area, observing for fires and making the appropriate notification in case of a fire, refer to Fire Watch form. Fire watch is required if building occupants are unprotected during the fire protection system outage.

Watch areas:
- Fire Command
- Fire Staff
- Fire Dispatch

A Fire Watch Notice on the building entrances and on lab doors is required when:
- The impairment extends beyond 10 hours in a 24 hour period per NFPA 1 and NFPA 25
- There is insufficient time to ensure operational restrictions are in place, e.g. in an emergency outage.
- The fire panel can not communicate an alarm condition within the building.
- The fire panel cannot report an alarm condition to Golden Fire Department. If this is the only impairment that exists (detection/protection/building notification is in place) then other limited duties may be assigned to the fire watch personnel.
- The impairment extends after hours and no one is actively working on the impairment.

Fire Watch notification must be submitted at least 72 hours or 3 business days before impairment.

- Notify building occupants of the outage and post notices.
- Remove postings from the panel and announced that the fire panel annunciator is located.

- Inform lab workers if present
- Pull in resources as needed to assist in
- Require fire watch when:
  - The impairment extends beyond 10 hours in a 24 hour period per NFPA 1 and NFPA 25
  - There is insufficient time to ensure operational restrictions are in place, e.g. in an emergency outage.
  - The fire panel can not communicate an alarm condition within the building.
  - The fire panel cannot report an alarm condition to Golden Fire Department. If this is the only impairment that exists (detection/protection/building notification is in place) then other limited duties may be assigned to the fire watch personnel.
  - The impairment extends after hours and no one is actively working on the impairment.

- Contact the monitoring company, building occupants, and impairment coordinator that protection has been restored.

- Email GFD (Fire command, staff and dispatch)
- Email insurance carrier
Example Impairment Notice to be posted on Fire Panels

COLORADO SCHOOL OF MINES

Impairment Notice
Building Fire System Impairment

Section 1 – General Information (Completed by requesting organization)

Building Name: [Name]
Building Address: [Address]
Impairment Coordinator (Name and phone number): [Name and phone number]
CISM Project Manager (Name and phone number): [Name and phone number]
Contractor (Company name, name of onsite representative and phone number): [Details]

Section 2 – Impairment Information (Completed by requesting organization)

Impairment Details/Description:

Hot work is associated with system impairment: [Yes/No]
If yes provide details on hot work activity:
End Time and Date:

Section 3 – Impairment Requirements and Controls (Completed by impairment coordinator)

Section 4 – Impairment Authorization

Signature of Impairment Coordinator: [Signature]
Date: [Date]

Example Fire Watch Form

COLORADO SCHOOL OF MINES

Fire Watch
Building Fire System Impairment

Section 1 – General Information (Supplement to System Impairment Notice)

Building Name: [Name]
Building Address: [Address]
Impairment Coordinator (Name and phone number): [Name and phone number]
CISM Project Manager (Name and phone number): [Name and phone number]
Contractor (Company name, name of onsite representative and phone number): [Details]

Section 2 – Impairment Information (Completed by requesting organization)

System Impaired:
Affected area within the building:
Reason for Fire Watch:
Does the impairment affect Fire Panel ability to notify GFDR?
Does the impairment affect Fire Panel ability to notify building residence?
Start Time and Date:
End Time and Date:

Section 3 – Fire Watch Details

Fire Watch Personnel have been briefed to the following:

Person(s) performing Fire Watch:

Print Name: [Name]
Print Name: [Name]
Print Name: [Name]
Example Outage Restriction Notice for Laboratory Buildings to be posted at Building Entrances

NOTICE

Fire protection system impairment

No Open Flame or Flammable Work in Building

This means:
• No bunsen burners
• No welding, cutting, or spark producing work such as grinding
• No work with pyrophorics, water reactives or explosives
• No flowing of flammable gases or performing exothermic reactions
• Heat producing experiments must be attended

Effective date(s)/times: Insert detail
Contact: PM Name and phone number

Example Outage Restriction Notice for Non-Laboratory Buildings to be posted at Building Entrances

NOTICE

Fire protection system impairment

No Hot Work in Building

This means:
• No open flames
• No welding, cutting, brazing or soldering
• No spark producing work such as grinding

Effective date(s)/times: Insert detail
Contact: PM Name and phone number

Example supplemental Notice to be posted at Building Entrances when a Fire Watch is in place

NOTICE

Fire Watch in Place

This means:
• If you observe smoke or signs of fire, exit the building and call 911
• Follow Fire Watch Personnel direction for evacuation of the building

Effective date(s)/times: Insert detail
Contact: PM Name and phone number