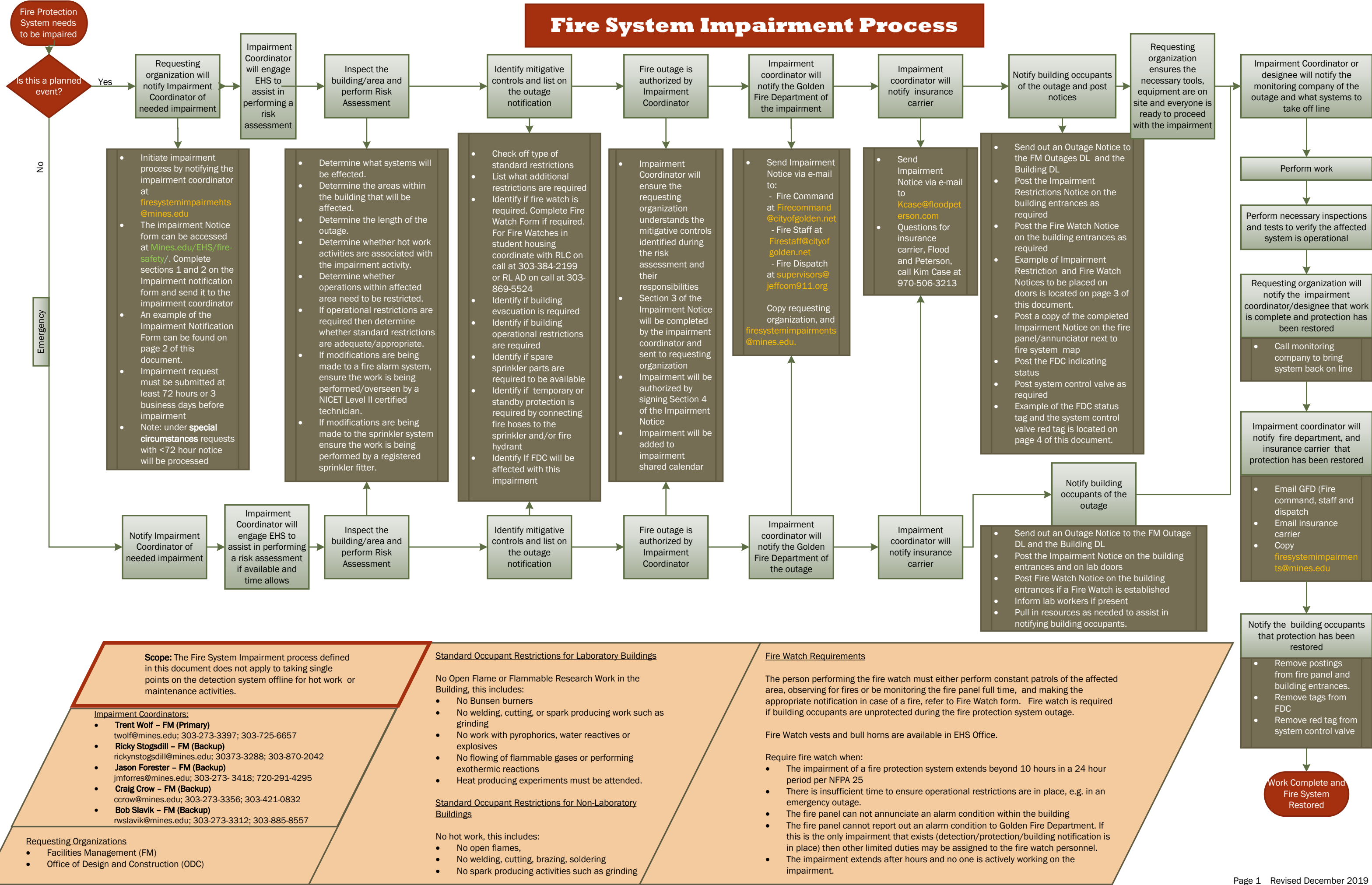


# Fire System Impairment Process



**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:

- **Trent Wolf – FM (Primary)**  
twolf@mines.edu; 303-273-3397; 303-725-6657
- **Ricky Stogsdill – FM (Backup)**  
rickynstogsdill@mines.edu; 30373-3288; 303-870-2042
- **Jason Forester – FM (Backup)**  
jmforges@mines.edu; 303-273- 3418; 720-291-4295
- **Craig Crow – FM (Backup)**  
ccrow@mines.edu; 303-273-3356; 303-421-0832
- **Bob Slavik – FM (Backup)**  
rslavik@mines.edu; 303-273-3312; 303-885-8557

Requesting Organizations

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

Standard Occupant Restrictions for Laboratory Buildings

- No Open Flame or Flammable Research Work in the Building, this includes:
- 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.

Standard Occupant Restrictions for Non-Laboratory Buildings

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

Fire Watch Requirements

The person performing the fire watch must either perform constant patrols of the affected area, observing for fires or be monitoring the fire panel full time, 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.

Fire Watch vests and bull horns are available in EHS Office.

Require fire watch when:

- The impairment of a fire protection system extends beyond 10 hours in a 24 hour period per NFPA 25
- There is insufficient time to ensure operational restrictions are in place, e.g. in an emergency outage.
- The fire panel can not annunciate an alarm condition within the building
- The fire panel cannot report out 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.

Example: Impairment Notice to be completed, sent to Fire Department and insurance company, and posted on Fire Panels


 **COLORADO SCHOOL OF MINES**

### Impairment Notice Building Fire System Impairment

Section 1 – General Information (Completed by requesting organization)		
Building Name:		
Building Address:		
Impairment Coordinator (Name and phone number):	Trent Wolf 303-273-3397 / 303-725-8857 (Primary) Ricky Stogsdill 303-273-3288 / 303-870-2042 (Back up) Jason Forester 303-273-3418 / 720-291-4295 (Back up) Craig Crow 303-273-3356 / 303-421-0832 (Back up) Bob Slavik 303-273-3312 / 303-885-8557 (Back up)	
CSM Project Manager (Name and phone number):		
Contractor (Company name, name of onsite representative and phone number):		
Section 2 – Impairment Information (Completed by requesting organization)		
System Impaired:		
Affected Area/Location:		
Impairment Details/Description/ Specific Location:		
Has a GFD Permit been issued for this work?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, list the permit number:
Hot work is associated with system impairment:	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes provide details on hot work activity:
Start Time and Date:		
End Time and Date:		
Section 3 – Impairment Requirements and Controls (Completed by impairment coordinator)		
<input checked="" type="checkbox"/> Building operating restrictions required		
<input type="checkbox"/> Standard restrictions for Laboratory Buildings No Open Flame or Flammable Work, this includes: <ul style="list-style-type: none"> <li>• No Bunsen burners</li> <li>• No welding, cutting, or spark producing work such as grinding</li> <li>• No work with pyrophorics, water reactives or explosives</li> <li>• No flowing of flammable gases or performing exothermic reactions</li> <li>• Heat producing experiments must be attended.</li> </ul>		
<input type="checkbox"/> Standard restrictions for Non-Laboratory Buildings No hot work, this includes: <ul style="list-style-type: none"> <li>• No open flames,</li> <li>• No welding, cutting, brazing, soldering</li> <li>• No spark producing activities such as grinding</li> </ul>		
<input type="checkbox"/> Other restrictions required – List:		
<input checked="" type="checkbox"/> Notification identifying restrictions posted at entry door		
<input checked="" type="checkbox"/> Impairment Notice to be posed at the building's fire panel and annunciator panel		
<input checked="" type="checkbox"/> Notification of impairment is to be sent to Golden FD, Building Occupants, and Insurance Company		
<input checked="" type="checkbox"/> Notify the Fire System monitoring company prior to impairing the fire protection system		
<input checked="" type="checkbox"/> Post Fire Department Connection (FDC) status – Details:		
<input type="checkbox"/> Post/Red Tag fire protection system control valve		
<input type="checkbox"/> Fire Watch Required – Complete the Fire Watch Form and brief workers to the requirements		
<input type="checkbox"/> Building Evacuation/Closure Required		
<input type="checkbox"/> Additional fire extinguishers are required – Number/Type/Location:		
<input type="checkbox"/> Temporary/standby protection is required – Details:		
<input type="checkbox"/> Spare sprinkler parts are required to be available		
<input type="checkbox"/> Hot work associated with the system impairment is authorized		
Section 4 – Impairment Authorization		
Signature of Impairment Coordinator: _____		Date: _____

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Example: Fire Watch Form

 **COLORADO SCHOOL OF MINES**

### Fire Watch Building Fire System Impairment (Supplement to Fire System Impairment Notice)

Section 1 – General Information (Completed by requesting organization or impairment coordinator)			
Building Name:			
Building Address:			
Impairment Coordinator (Name and phone number):	Trent Wolf 303-273-3397 / 303-725-8857 (Primary); Ricky Stogsdill 303-273-3288 / 303-870-2042 (Back up); Jason Forester 303-273-3418 / 720-291-4295 (Back up); Craig Crow 303-273-3356 / 303-421-0832 (Back up); Bob Slavik 303-273-3312 / 303-885-8557 (Back up)		
CSM Project Manager (Name and phone number):			
Contractor (Company name, name of onsite representative and phone number):			
Section 2 – Impairment Information (Completed by requesting organization or impairment coordinator)			
System Impaired:			
Affected area within the building:			
Reason for Fire Watch	<input type="checkbox"/> Impairment will extend beyond 10 hours <input type="checkbox"/> Impairment extends after hours <input type="checkbox"/> Fire panel cannot annunciate alarm in building <input type="checkbox"/> Emergency Outage <input type="checkbox"/> Fire panel cannot notify Golden Fire Department		
Does the impairment affect Fire Panel ability to notify GFD?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes then fire watch personnel will need to have a cell phone or phone access in the immediate area to call 911	
Does the impairment affect Fire Panel ability to notify building residence?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, then will the fire pull station initiate building notification?	<input type="checkbox"/> Yes      If no, then use alternate means of notification, identify means in the next block <input type="checkbox"/> No
Start Time and Date:			
End Time and Date:			
Section 3 – Fire Watch Details			
Fire Watch Personnel have been briefed to the following:			
<input type="checkbox"/> Assigned duty requirements, check the one that applies <ul style="list-style-type: none"> <li><input type="checkbox"/> They have no other duties other than to perform a fire watch.</li> <li><input type="checkbox"/> Limited duties may be assigned; must remain attentive in the building.</li> </ul>			
<input type="checkbox"/> Their primary role, check the one that applies <ul style="list-style-type: none"> <li><input type="checkbox"/> Look for observable signs of smoke and/or fire.</li> <li><input type="checkbox"/> Listen for a fire alarm and call 911 if a fire alarm is activated.</li> <li><input type="checkbox"/> Monitor fire panel for incoming alarms</li> </ul>			
<input type="checkbox"/> They are to wear the Fire Watch vest provided during their patrols			
<input type="checkbox"/> Continually patrol/monitor the affected area (refer to section 2) by:			
<input type="checkbox"/> Walking through: <ul style="list-style-type: none"> <li>- Common areas</li> <li>- Corridors/Hallways</li> <li>- Stairwells</li> <li>- Food preparation areas</li> </ul>			
<input type="checkbox"/> Opening doors and looking in: <ul style="list-style-type: none"> <li>- Mechanical rooms</li> <li>- Electrical rooms</li> <li>- Laboratories</li> </ul>			
<input type="checkbox"/> Other _____			
<input type="checkbox"/> If signs of smoke and/or fire is observed then they will take the following actions: <ul style="list-style-type: none"> <li>• Call 911</li> <li>• Notify building occupants by pulling the nearest fire alarm pull station or using an alternate means as identified in section 2</li> </ul>			
<input type="checkbox"/> Do not put themselves in jeopardy when notifying building residence using alternate means of notification			
<input type="checkbox"/> Contact the impairment coordinator or PM (see section 1) if they have questions or concerns while performing the Fire Watch.			
Person(s) performing Fire Watch		_____	_____
		Print Name	Signature
		_____	_____
		Print Name	Signature

Rev. December 2019



Example: Impairment 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: 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*

Example: Impairment 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: Fire Department Connection Status Tag

# FIRE SYSTEM IMPAIRED

**FDC OPERATIONAL**

**YES NO PARTIAL**

**NOTES**

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Contact Facilities Management 303-273-3397

Example: Red Tag for System Control Valves

If the system impairments constitute an "emergency" impairment as defined in NFPA 25, attach this red tag to the applicable system riser. An authorized individual may remove this tag after a service tag has been attached indicating the condition has been corrected.

Name of Owner or Occupant \_\_\_\_\_

Address \_\_\_\_\_

Building No. or Location or System No. \_\_\_\_\_

List Emergency Impairments:

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**DO NOT REMOVE**  
BY ORDER OF GOLDEN FIRE MARSHAL

**RED TAG**

Colorado School of Mines  
1318 Maple Street  
Golden, CO 80401  
303-273-3330

RME's License Number \_\_\_\_\_

Printed Name of Service Person/Inspector \_\_\_\_\_

Signature of Authorized Service Person/Inspector \_\_\_\_\_

**IMMEDIATELY REPORT STATUS TO OWNER AND AHJ**  
(and in writing within 24 hours)

16	1
15	2
14	3
13	4
12	5
11	6
10	7
9	8
8	9
7	10
6	11
5	12
4	13
3	14
2	15
1	16

DEC	2022
NOV	
OCT	2021
SEP	
AUG	2020
JUL	
JUN	2019
MAY	
APR	2018
MAR	
FEB	2017
JAN	