Hot Work
Loss Prevention Program
Refresher for Building Coordinators

July 21, 2021

Overview

- Background
- Locations
- Process
- Training
- What can you do as a Building Coordinator?

For the full policy go to: https://riskmanagement.fo.uiowa.edu/hot-work

Campus Hot Work Committee

- Brent Anderson – Facilities Management
- Josey Bathke – Risk Management
- Chris James – UIHC Safety and Security
- Dustin Lane – Facilities Management
- Bruce McAvoy – UI Fire Safety
- Steve Paulsen – Environmental Health and Safety
- Tony Weinschenk – UIHC Fire Safety

Purpose

- Establish a consistent campus-wide policy regarding Hot Work
- Reduce the risk of injury and loss by fire caused by Hot Work activities

Scope

- Requires ***any individual*** who engages in Hot Work to comply with University policy

- Applies to all faculty, staff, students, or third parties performing Hot Work on behalf of the University of Iowa and in all University of Iowa facilities, including UIHC

Definitions

Hot Work – ***anything that produces flame, heat, or sparks***

- Electric or gas welding, abrasive cutting, soldering, grinding, torch work, and brazing;
- Includes acetylene torches, arc welding equipment, portable grinders, and propane torches;
- Also non-rated electrical tools and equipment when used in a hazardous environment

Definitions

Fire Safety Supervisor

-Designated permit authorizer,

-Trained to authorize Hot Work Activities, and

-Supervises the individual performing Hot Work

Definitions

Fire Watch

-Designated and trained to observe Hot Work for the purpose of preventing, detecting, and suppressing fires

-Must continuously monitor Hot Work (during and after for 60/180 minutes depending on the type of hot work)

-Must be trained to use manual firefighting equipment

-Must have the ability to summon emergency assistance if needed

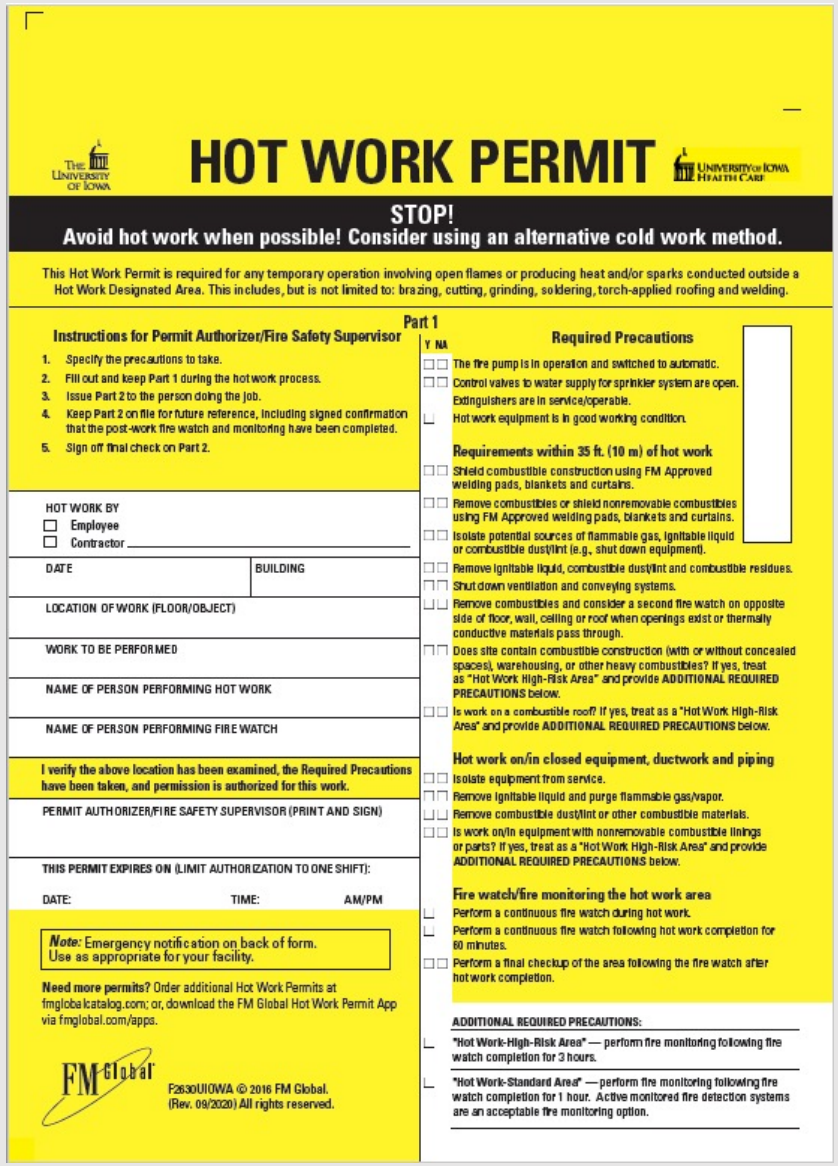
-CANNOT BE THE PERSON PERFORMING THE HOT WORK!!!!

Hot Work Locations

1. Temporary by issuance of approved UI Hot Work Permit (Yellow Permit) or

2. Designated Hot Work Sites with visible "Designated Hot Work Site" permit/certificate posted (White Permit)
   - Formally evaluated and meet the requirements of the International Fire Code
   - Inspection and verification of proposed designated location will be completed by UI or UIHC Fire Safety
   - Only be used by trained and authorized individuals
   - ***NOTE: failure to adhere to safety requirements could cause the designation to be revoked in the sole discretion of UI or UIHC Fire Safety***

Temporary Hot Work Permit



HOT WORK PERMIT

STOP!
Avoid hot work when possible! Consider using an alternative cold work method.

This Hot Work Permit is required for any temporary operation involving open flames or producing heat and/or sparks conducted outside a Hot Work Designated Area. This includes, but is not limited to: brazing, cutting, grinding, soldering, torch-applied roofing and welding.

Instructions for Permit Authorizer/Fire Safety Supervisor

1. Specify the precautions to take.
2. Fill out and keep Part 1 during the hot work process.
3. Issue Part 2 to the person doing the job.
4. Keep Part 2 on file for future reference, including signed confirmation that the post-work fire watch and monitoring have been completed.
5. Sign off final check on Part 2.

HOT WORK BY
☐ Employee
☐ Contractor _____

DATE | BUILDING

LOCATION OF WORK (FLOOR/OBJECT)

WORK TO BE PERFORMED

NAME OF PERSON PERFORMING HOT WORK

NAME OF PERSON PERFORMING FIRE WATCH

I verify the above location has been examined, the Required Precautions have been taken, and permission is authorized for this work.

PERMIT AUTHORIZER/FIRE SAFETY SUPERVISOR (PRINT AND SIGN)

THIS PERMIT EXPIRES ON (LIMIT AUTHORIZATION TO ONE SHIFT):

DATE: TIME: AM/PM

Note: Emergency notification on back of form. Use as appropriate for your facility.

Need more permits? Order additional Hot Work Permits at fmglobalcatalog.com; or, download the FM Global Hot Work Permit App via fmglobal.com/apps.

Part 1

Required Precautions

Y	NA	
☐	☐	The fire pump is in operation and switched to automatic.
☐	☐	Control valves to water supply for sprinkler system are open.
		Extinguishers are in service/operable.
	☐	Hot work equipment is in good working condition.

Requirements within 35 ft. (10 m) of hot work

☐	☐	Shield combustible construction using FM Approved welding pads, blankets and curtains.
☐	☐	Remove combustibles or shield nonremovable combustibles using FM Approved welding pads, blankets and curtains.
☐	☐	Isolate potential sources of flammable gas, ignitable liquid or combustible dust/lint (e.g., shut down equipment).
☐	☐	Remove ignitable liquid, combustible dust/lint and combustible residues.
☐	☐	Shut down ventilation and conveying systems.
☐	☐	Remove combustibles and consider a second fire watch on opposite side of floor, wall, ceiling or roof when openings exist or thermally conductive materials pass through.
☐	☐	Does site contain combustible construction (with or without concealed spaces), warehousing, or other heavy combustibles? If yes, treat as "Hot Work High-Risk Area" and provide ADDITIONAL REQUIRED PRECAUTIONS below.
☐	☐	Is work on a combustible roof? If yes, treat as a "Hot Work High-Risk Area" and provide ADDITIONAL REQUIRED PRECAUTIONS below.

Hot work on/in closed equipment, ductwork and piping

☐	☐	Isolate equipment from service.
☐	☐	Remove ignitable liquid and purge flammable gas/vapor.
☐	☐	Remove combustible dust/lint or other combustible materials.
☐	☐	Is work on/in equipment with nonremovable combustible linings or parts? If yes, treat as a "Hot Work High-Risk Area" and provide ADDITIONAL REQUIRED PRECAUTIONS below.

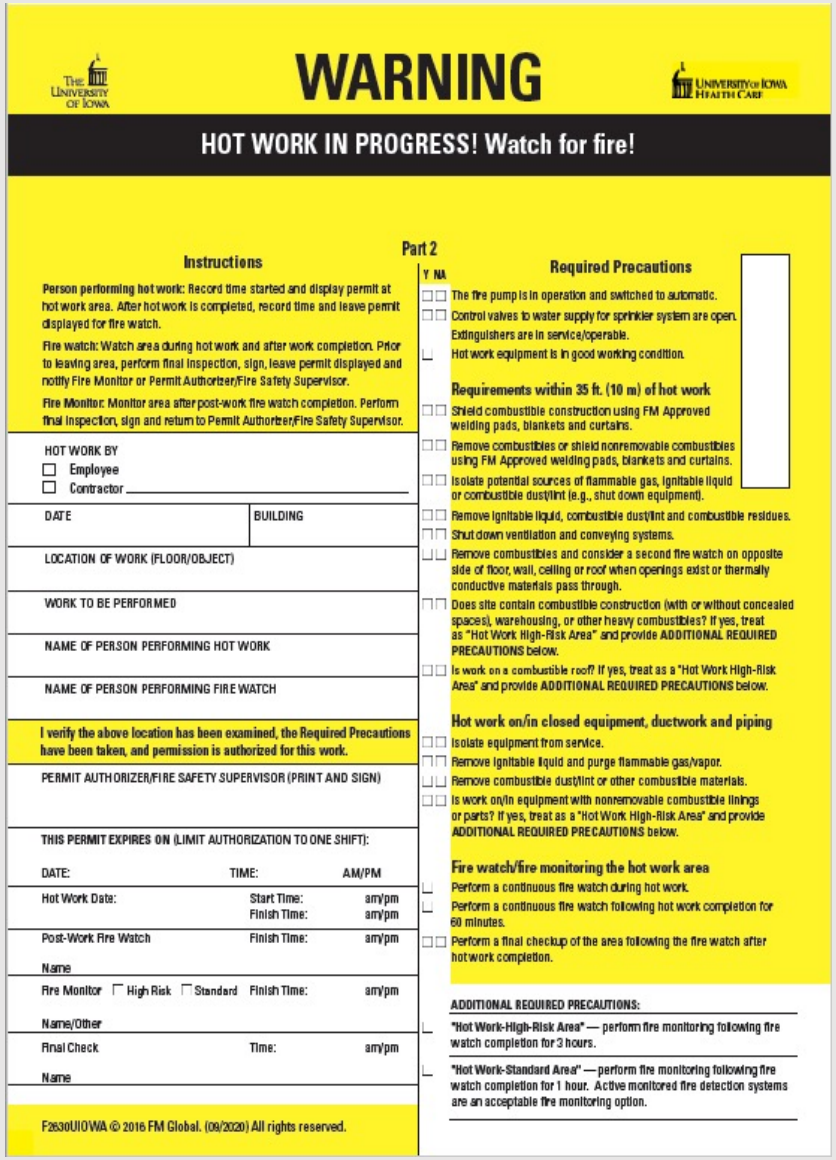
Fire watch/fire monitoring the hot work area

	☐	Perform a continuous fire watch during hot work.
	☐	Perform a continuous fire watch following hot work completion for 60 minutes.
☐	☐	Perform a final checkup of the area following the fire watch after hot work completion.

ADDITIONAL REQUIRED PRECAUTIONS:

☐ "Hot Work-High-Risk Area" — perform fire monitoring following fire watch completion for 3 hours.

☐ "Hot Work-Standard Area" — perform fire monitoring following fire watch completion for 1 hour. Active monitored fire detection systems are an acceptable fire monitoring option.



WARNING

HOT WORK IN PROGRESS! Watch for fire!

Instructions

Person performing hot work: Record time started and display permit at hot work area. After hot work is completed, record time and leave permit displayed for fire watch.

Fire watch: Watch area during hot work and after work completion. Prior to leaving area, perform final inspection, sign, leave permit displayed and notify Fire Monitor or Permit Authorizer/Fire Safety Supervisor.

Fire Monitor: Monitor area after post-work fire watch completion. Perform final inspection, sign and return to Permit Authorizer/Fire Safety Supervisor.

HOT WORK BY
☐ Employee
☐ Contractor _____

DATE | BUILDING

LOCATION OF WORK (FLOOR/OBJECT)

WORK TO BE PERFORMED

NAME OF PERSON PERFORMING HOT WORK

NAME OF PERSON PERFORMING FIRE WATCH

I verify the above location has been examined, the Required Precautions have been taken, and permission is authorized for this work.

PERMIT AUTHORIZER/FIRE SAFETY SUPERVISOR (PRINT AND SIGN)

THIS PERMIT EXPIRES ON (LIMIT AUTHORIZATION TO ONE SHIFT):

DATE: TIME: AM/PM

Hot Work Date: Start Time: am/pm Finish Time: am/pm

Post-Work Fire Watch Finish Time: am/pm

Name

Fire Monitor ☐ High Risk ☐ Standard Finish Time: am/pm

Name/Other

Final Check Time: am/pm

Name

Part 2

Required Precautions

Y	NA	
☐	☐	The fire pump is in operation and switched to automatic.
☐	☐	Control valves to water supply for sprinkler system are open.
		Extinguishers are in service/operable.
	☐	Hot work equipment is in good working condition.

Requirements within 35 ft. (10 m) of hot work

☐	☐	Shield combustible construction using FM Approved welding pads, blankets and curtains.
☐	☐	Remove combustibles or shield nonremovable combustibles using FM Approved welding pads, blankets and curtains.
☐	☐	Isolate potential sources of flammable gas, ignitable liquid or combustible dust/lint (e.g., shut down equipment).
☐	☐	Remove ignitable liquid, combustible dust/lint and combustible residues.
☐	☐	Shut down ventilation and conveying systems.
☐	☐	Remove combustibles and consider a second fire watch on opposite side of floor, wall, ceiling or roof when openings exist or thermally conductive materials pass through.
☐	☐	Does site contain combustible construction (with or without concealed spaces), warehousing, or other heavy combustibles? If yes, treat as "Hot Work High-Risk Area" and provide ADDITIONAL REQUIRED PRECAUTIONS below.
☐	☐	Is work on a combustible roof? If yes, treat as a "Hot Work High-Risk Area" and provide ADDITIONAL REQUIRED PRECAUTIONS below.

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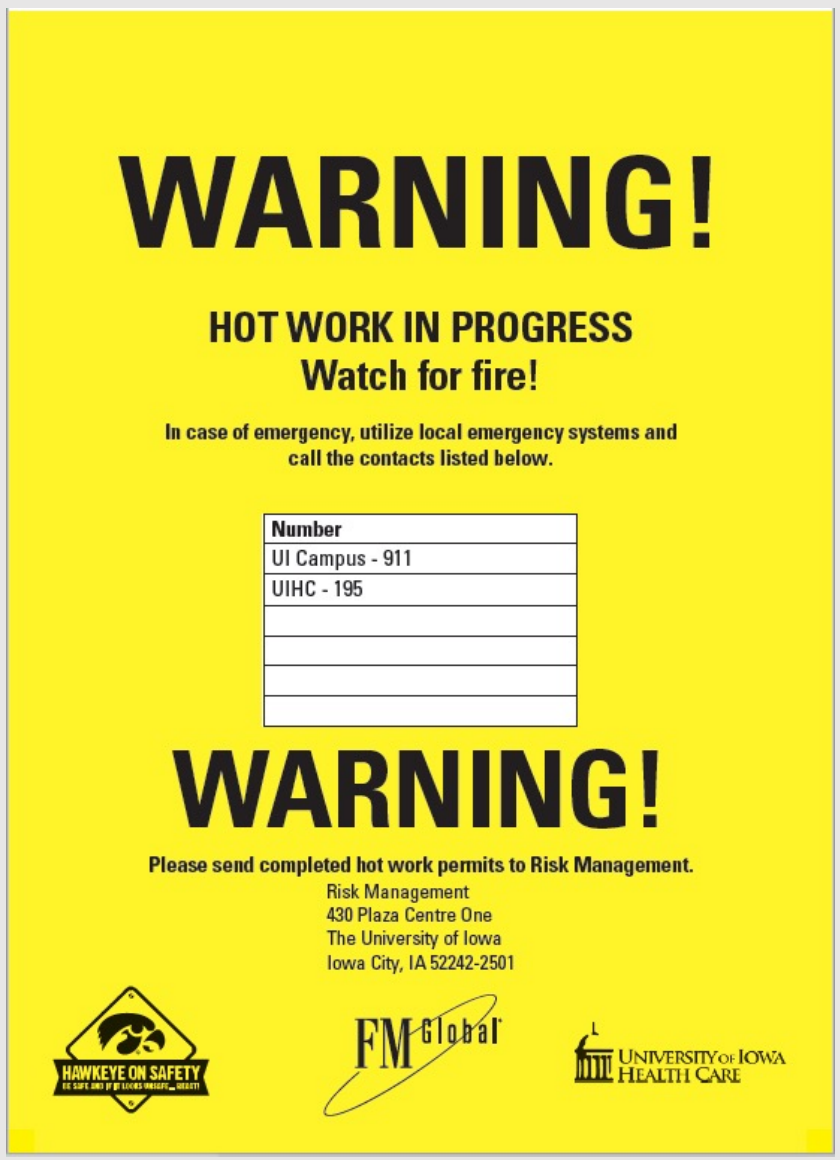


WARNING!

HOT WORK IN PROGRESS
Watch for fire!

In case of emergency, utilize local emergency systems and call the contacts listed below.

Number
UI Campus - 911
UIHC - 195

WARNING!

Please send completed hot work permits to Risk Management.

Risk Management
430 Plaza Centre One
The University of Iowa
Iowa City, IA 52242-2501

HAWKEYE ON SAFETY
BE SAFE AND IF IT LOOKS UNSAFE... REPORT IT!

Designated Hot Work Site Permit

UNIVERSITY of IOWA
DEPARTMENT OF PUBLIC SAFETY
FIRE SAFETY

Location:	Date:	Inspection Type:
Room 145	September 1, 2016	Designated Hot Work Site

Building:	Bldg. #	Bldg. Abbrev.
Madison Street Services Building	160	MSSB

Address:	User Group:
640 South Madison Street	Building and Landscape Services

Facility Contact
Curt Fountain

Building Occupancy Type:	Construction Type:	Fire Sprinkler System:
Factory Industrial "F-1" (Industrial; moderate hazard)	IIB (Non-combustible; non-protected)	YES

WE HAVE INSPECTED THE ABOVE PREMISES AND FOUND:

Based on my inspection of the Sheet Metal Shop; Room 145, located in the Madison Street Services Building, I approve the use of the room as a designated hot work site in accordance with Chapter 35 of the 2015 International Fire Code and the University of Iowa Hot Work Loss Prevention Program.

Please ensure the space is free of all combustibles, prior the start of any hot work. All requirements of Chapter 35 and the University's Hot Work Loss Prevention Program are properly followed before, during, and after all hot work is performed in this space.

This space will be subject to periodical inspections by this office and any deficiencies noted may result in loss of hot work privileges.

Type of hot work to be performed at this site:

- Tungsten Inert Gas (TIG) welding
- Metal Inert Gas (MIG) welding
- Oxy – acetylene welding / cutting
- Shielded metal arc ("stick" welding)
- Grinding
- Sanding
- Plasma cutting
- Abrasive cutting (chop saw)
- Soldering

THIS PERMIT WILL EXPIRE ON SEPTEMBER 8th, 2017

Post in a conspicuous location within the hot work site

Inspected By:

Bruce McAvoy, Fire Safety Coordinator

University of Iowa Department of Public Safety
808 University Capitol Centre Iowa City, IA 52242-5500

Must be posted onsite

List of University Designated Permit Sites as of 5/19/21

*Updated annually

Located at:

https://riskmanagement.fo.uiowa.edu/hot-work-program#Appendices

APPENDIX A - University of Iowa Hot Work Sites

As of 05/19/2021

Building	Location Details	Contact Information
Becker Communications Studies Building	Room 242	Angela Looney
Butler Building (Landscape Services Maintenance Shop)	SE portion of the shop	Dave Brown
Cambus Maintenance Shop	Center garage bays	Pat Smith
Carver Hawkeye Arena	Room S113	Damian Simcox
Chemistry Building	Room W16	Justin Garvin
	Room W39	Jeremy Richardson
	Room W152	Benj Revis
Currier Residence Hall	Room SB41	Randy Ebling
Dental Science Building	S393, NW Corner of room	Curtis Iburg
	S493, SW Corner of room	Curtis Iburg
	S495, SE Corner of room	Curtis Iburg
Finkbine Shop Facility	NE corner of shop	Mike Wadle
Hancher Auditorium	Scene Shop, Room 1336	Mike Nolte
Hillcrest Residence Hall	Room N3	Mark Colbert
Hydraulic Annex 2 – Oakdale	North Center portion of building	Brandon Barquist
Hydraulics East Annex	SE corner of the building	Brandon Barquist
Hydraulics Model Annex	North Center portion of the building	Brandon Barquist
Laundry Services	Room 124	Mike Reynolds
Madison Street Services Building	Room 110	John Weyer
	Room 145	Andy Bruckner
National Advanced Driving Simulator – Oakdale	Room 101	Corey Kreutz
Oakdale Shops Building "D"	Ground floor, North bays	Rich Krebs
Oakdale Studio Facility	Exterior of building near loading dock	Ben Anzelc
Power Plant	2nd Floor Maintenance Shop	Landon Geroniz
	2nd Floor Areas	Landon Geroniz
Research Park Landscape Services	South center of shop along wall	Scott Shrader
Seamans Center for Engineering	West side of Room G440-A	Mike Hillman
Theater Building	Scene shop	Rob Durham
Van Allen Hall	Room 116, machine shop	Brian Busch
Visual Arts Building	Ceramics – Rooms W201, W221, and W231	Benj Upchurch
	Jewelry – W350 suite of rooms	Ben Anzlec
	Sculpture – W251	Tony Sutowski
	Room E350	Ben Anzlec
	Room E308	Benj Upchurch
	Room E220	Benj Upchurch
	Room W150-C	Man-Ho Cho
	Room W150-D	Man-Ho Cho
	Room W160	Man-Ho Cho
Voxman Music Building	Room 4460	Chad Walker

If the HW site is not on this list then they must have a temporary permit (yellow permit) at the location EACH & EVERY day that Hot Work is occurring

How to Obtain and Use a Hot Work Permit

A. The following offices have blank Temporary Hot Work Permits (yellow permit): UIHC Safety & Security, FM Safety Manager and Risk Management

B. A Hot Work request is directed to the designated Fire Safety Supervisor.

C. Fire Safety Supervisor visits the Hot Work site with the requestor to review the planned Hot Work and site.

D. Fire Safety Supervisor fully completes the balance of the Hot Work Permit Part 1 (signature required).

   A. University – Part 1 is kept by the Fire Safety Supervisor for reminder/notification.

   B. UHIC – Part 1 is kept in the UIHC Fire Safety Office for tracking.

E. Hot Work Permit Part 2 is given to the Hot Worker to ***visibly post at Temporary Hot Work Site***.

How to Obtain and Use a Hot Work Permit

F. The Hot Worker, with Fire Watch present, performs the necessary Hot Work

G. After Hot Work is completed, ***the Fire Watch stays at the work site for 60/180 continuous minutes*** monitoring for smoldering and fire development.

H. At the end of the 60/180 minutes, the Fire Watch signs the "post Hot Work Fire Watch" on Permit Part 2.
   - REMEMBER – During the Hot Work the Fire Watch cannot be the same as the person performing the Hot Work.

I. Once Hot Work Permit Part 2 is completed and verified, return Permit Part 2 to the Fire Safety Supervisor, or Permit Authorizer.

J. Fire Safety Supervisor or Permit Authorizer should forward completed Permit Part 2 to:
   - University:
     i. Risk Management Office, 430 Plaza Centre One, or
     ii. If it is a Design & Construction Project, the construction manager or Fire Safety Supervisor for that project
   - UIHC: UIHC Fire Safety Office

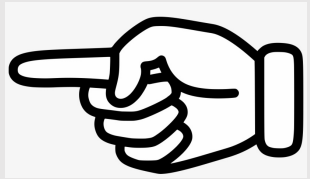
Annual Training Requirement

- **At UIHC:** contact UIHC Fire Safety for UIHC training registration info

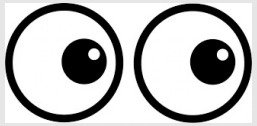
- **Outside UIHC:**
  - For non-uiowa staff: https://learn.uiowa.edu/
  - For students: https://compliance.hr.uiowa.edu/
  - For UI staff: Employee Self-Service

What can you do as a Building Coordinator?

Feel comfortable:



- **Directing** contractors with questions to a member of the Campus HW Committee



- **Looking** for the hot work permit anytime you see/smell/hear hot work (it must be posted in the area) and look for a 2nd person doing the fire watch
- **Asking** the contractor/worker for their hot work permit if you don't see it

- **Asking** the contractor/worker to stop work if they do not have a proper and completed hot work permit present

- **Contacting** FM@YourService, UIHC Safety & Security, UI or UIHC Fire Safety if you have concerns or questions

Questions

University Fire Safety
808 UCC
(319) 335-5389
https://police.uiowa.edu/fire-safety
bruce-mcavoy@uiowa.edu

UIHC Safety & Security
0081 RCP UIHC
(319) 356-2658

Website on UIHC intranet

Questions

FM@Your Service
210 USB
(319) 335-5071
https://www.facilities.uiowa.edu/services/fmyourservice
facilities-wcc@uiowa.edu

Risk Management
Josey Bathke or Melissa Miller
430 PCO
(319) 335-0010
https://uiowa.edu/riskmanagement/
risk-management@uiowa.edu

Questions

Environmental Health & Safety
122 Grand Avenue Court
(319) 335-8501
https://ehs.research.uiowa.edu/
ehs-contact@uiowa.edu