

WELCOME

Monthly Building Coordinator Meeting Via ZOOM

April 17, 2024



Agenda

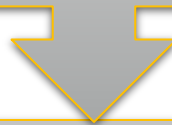
Asset Optimization Services (AOS):

Andy Van Etten – Associate Director, AOS - FM Operations & Maintenance



Hot Work Permit Process:

Melissa Miller – Risk Management Administrator
Brent A Anderson – FM Occupational Safety Manager



Safety Culture and Tips:

Brent A Anderson – FM Occupational Safety Manager

April '24 Building Coordinators Update - AOS

April 17, 2024

Asset Optimization Services (AOS)

Who – The AOS Team is a technical resource team reporting into Building Operations and Maint. (Julie Sychra)

What – Focus on identifying and improving energy and reliability of building systems. (Mechanical, Electrical, and Plumbing)

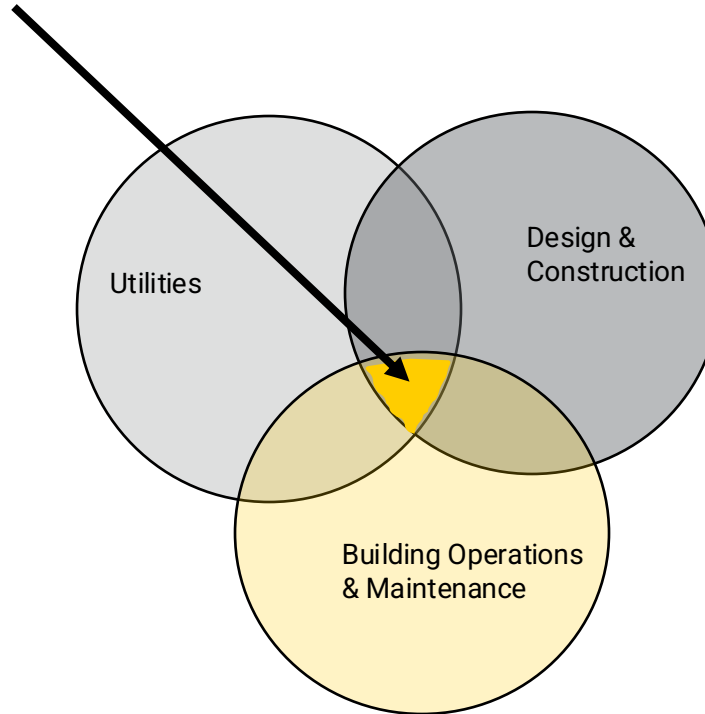
How – Advocating for decision-making based on Total Cost of Ownership.

AOS Team Members

Andy Van Etten:
AOS Leader

**Brad Dameron,
Brian Dameron**
Analytic Response Group

Scott Sellner
Controls / ARG / AOS



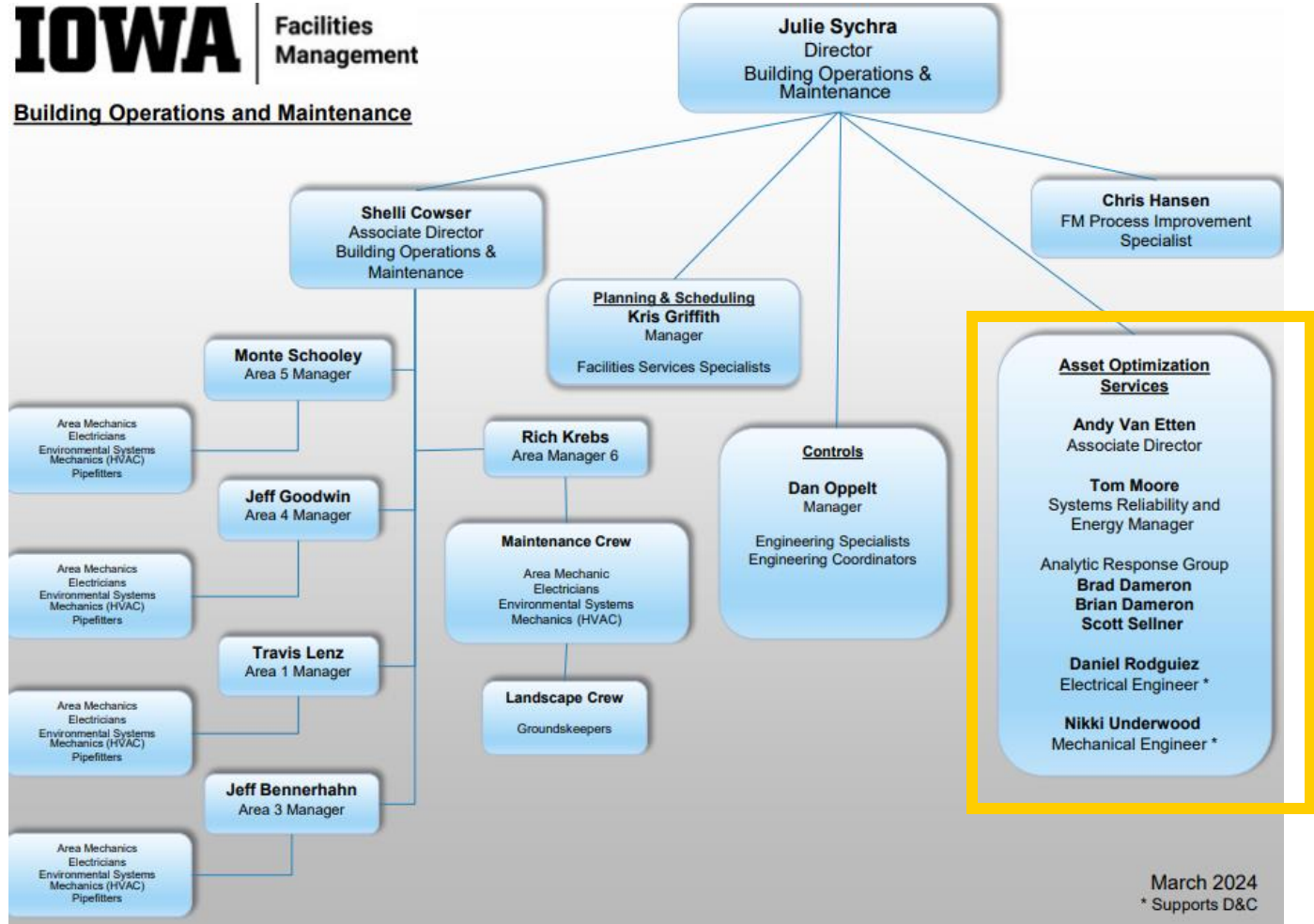
Nikki Underwood, Daniel Rodriguez
Mechanical Engineer, Electrical Engineer:
(Filling two needs previously identified by D&C)

Jake Humphreys:
D&C Quality Leader

Tom Moore:
Systems Reliability and Energy Manager

Org Chart Impacts

Building Operations and Maintenance



Four Asset Optimization Services (AOS)

Four Main AOS Services:

- 1.Total Cost of Ownership resource
- 2.UI Design Standards and Procedures content development support
- 3.Energy Fund prioritization and project support
- 4.Building performance optimization

What is TCO?

- Total cost of Ownership (TCO) is a holistic approach to asset management that allows stakeholders to make data driven decisions that consider the entire life-cycle of the asset.
- Usually, TCO is a financial estimate based on **facts, experience, and assumptions** that are documented and quantified.

$$\text{TCO} = \Sigma c_a + \Sigma c_b + \Sigma c_c + \Sigma c_d + \Sigma c_e$$

Where:

C_a = Initial Asset Costs / First Cost (one Time)

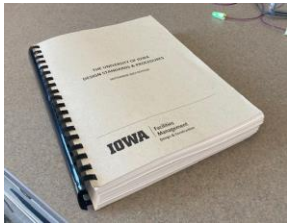
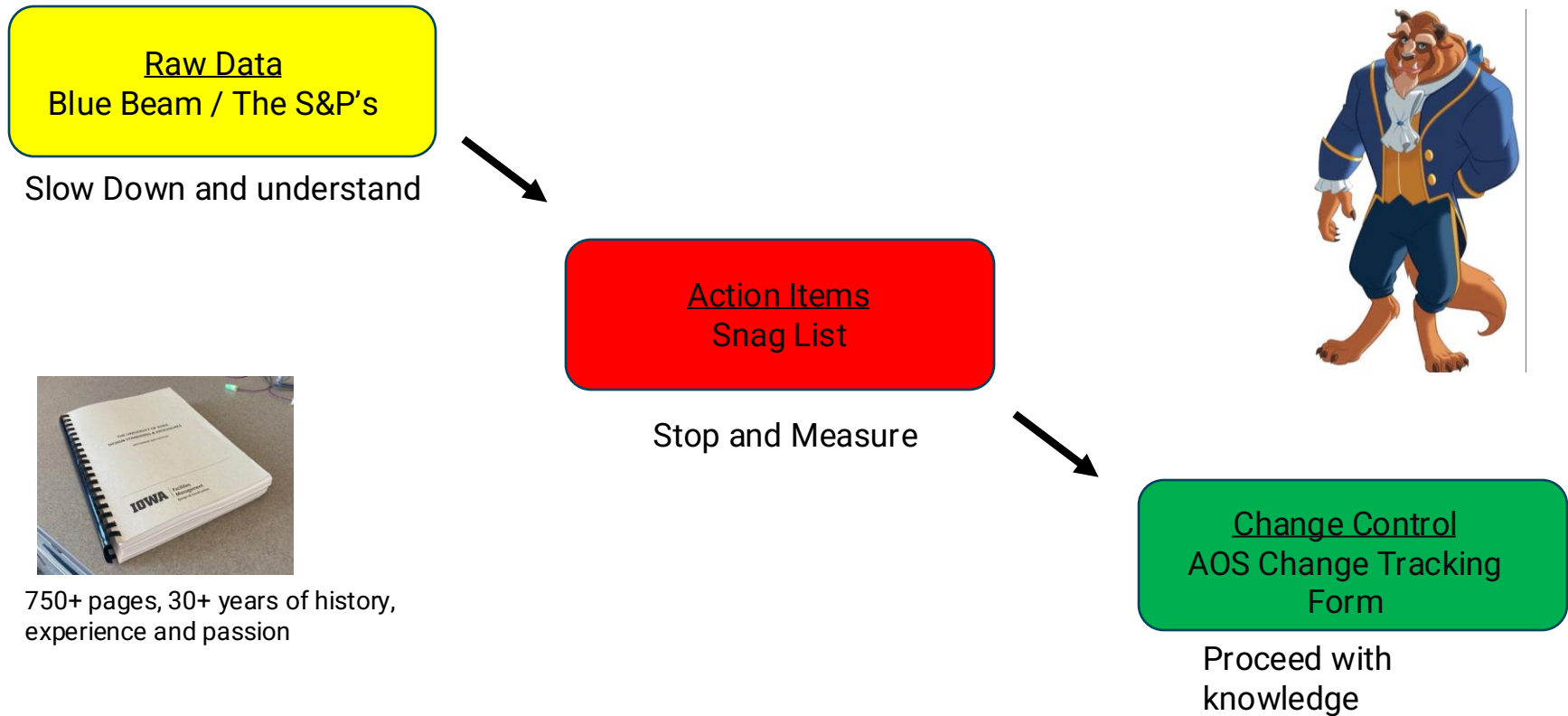
C_b = Cost of Operations and Maintenance (Annual Recurring)

C_c = Cost of Utilities (Annual Recurring)

C_d = Cost of Renewal (Periodic Recurring)

C_e = Cost at End of Useful / Functional Life (One Time)

Standards and Procedures – “The Beast”



750+ pages, 30+ years of history, experience and passion

“The Utility Rate Energy Fund”

- Every year \$500K of our utility rates are set aside to fund “Energy and Reliability” type projects. All rate paying departments are included.
- AOS wants to work with you to prioritize and enable projects using the “Utility Rate Energy Fund” Prioritization Matrix
- AOS also want to collaborate with you to re-apply successful projects and identify new ones.

The “Energy Related” Matrix

- Version of a proven FM developed system to score potential projects based on the following criteria.

Safety
Energy Savings
Maintenance Savings
Reliability improvement
Obsolescence risk
Project complexity
Customer Impacts

We are a MEP focused team and the fund was established enable Energy and Reliability based projects.

Building Performance / Optimization – Blitz Ideas

1. Main Library – HVAC
2. Dental Science – Air Compressors
3. Campus Rec and Wellness – HVAC Retro Commissioning
4. Siemens – VAV set points on units w/o re-heats
5. Trowbridge Hall - Exhaust

Completed Events

Chemistry Fume Hood
IMU HVAC
Schaeffer Hall HVAC

Targeting week of 6/10
For next event

IOWA

Hot Work Loss Prevention Program

Facilities Management & Risk Management

Brent Anderson and Melissa Miller

April 17, 2024

Agenda

- Scope
- Definitions
- Standard Hot Work Procedures & Responsibilities
- Process to Obtain and Use a Hot Work Permit
- Training Requirement

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...

- The following operations **do not** require a Hot Work Permit:
 - Bunsen burners in laboratories
 - Small electric soldering irons used for repairing electronics only
 - Authorized grilling on campus (must be in compliance with: <https://uiowa.edu/riskmanagement/outdoor-gascharcoal-grilling-campus>)
 - Sterno products for official university catered events.

Definitions....

Fire Safety Supervisor

- Designated permit authorizer,
- Trained to authorize Hot Work Activities, and
- Supervises the individual performing Hot Work

Definitions.....

Fire Watch

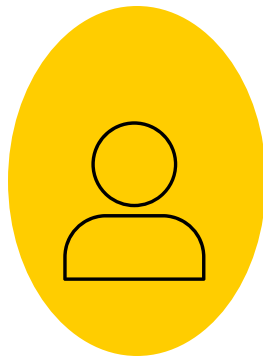
- Designated and trained to observe Hot Work for the purpose of **preventing, detecting, and suppressing** fires
- Must continuously monitor Hot Work (during and **after** for 60 minutes)
- Must be trained to use manual firefighting equipment
 - There must a fire extinguisher present at the scene of the Hot Work, this cannot be the designed site fire extinguisher
- Must have the ability to summon emergency assistance if needed

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

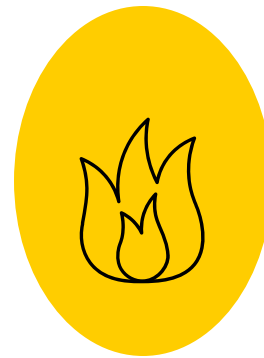
Standard Hot Work Procedures & Responsibilities



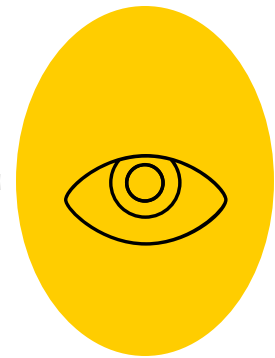
Hot Work Locations



Fire Safety Supervisor



Employee Performing the Hot Work

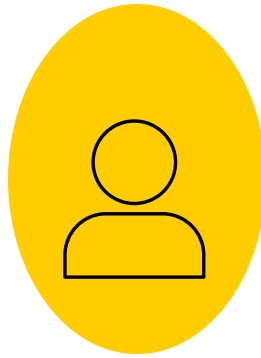


Fire Watch

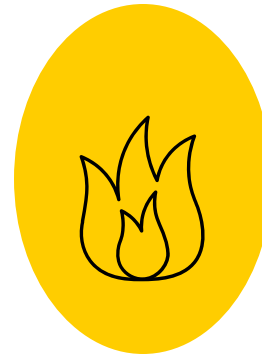
Standard Hot Work Procedures & Responsibilities



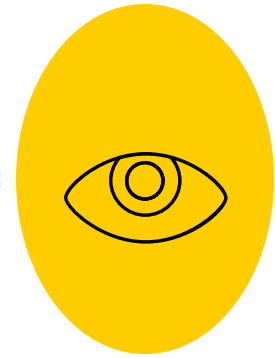
**Hot Work
Locations**



**Fire Safety
Supervisor**



**Employee
Performing the
Hot Work**



Fire Watch

Hot Work Locations


- Temporary by issuance of approved UI Hot Work Permit (Yellow Permit) or
- 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 Campus Safety or UIHC Safety and Security.
 - Only be used by trained and authorized individuals
 - [List of Designated Hot Work Sites](#)

Temporary Permit


Part 1

Part 2

Back of Part



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	Required Precautions
<ol style="list-style-type: none"> Specify the precautions to take. Fill out and keep Part 1 during the hot work process. Issue Part 2 to the person doing the job. Keep Part 2 on file for future reference, including signed confirmation that the post-work fire watch and monitoring have been completed. Sign off final check on Part 2. 	<input type="checkbox"/> The fire pump is in operation and switched to automatic. <input type="checkbox"/> Control valves to water supply for sprinkler system are open. <input type="checkbox"/> Extinguishers are in service/operable. <input type="checkbox"/> Hot work equipment is in good working condition. Requirements within 35 ft. (10 m) of hot work: <input type="checkbox"/> Shield combustible construction using FM Approved welding pads, blankets and curtains. <input type="checkbox"/> Remove combustibles or shield nonremovable combustibles using FM Approved welding pads, blankets and curtains. <input type="checkbox"/> Isolate potential sources of flammable gas, ignitable liquid or combustible dust/fine (e.g., shut down equipment). <input type="checkbox"/> Remove ignitable liquid, combustible dust/fine and combustible residues. <input type="checkbox"/> Shut down ventilation and conveying systems. <input type="checkbox"/> 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. <input type="checkbox"/> 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. <input type="checkbox"/> 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 <input type="checkbox"/> Isolate equipment from service. <input type="checkbox"/> Remove ignitable liquid and purge flammable gas/vapor. <input type="checkbox"/> Remove combustible dust/fine or other combustible materials. <input type="checkbox"/> 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 <input type="checkbox"/> Perform a continuous fire watch during hot work. <input type="checkbox"/> Perform a continuous fire watch following hot work completion for 60 minutes. <input type="checkbox"/> Perform a final checkup of the area following the fire watch after hot work completion. ADDITIONAL REQUIRED PRECAUTIONS: <input type="checkbox"/> "Hot Work High-Risk Area" — perform fire monitoring following fire watch completion for 3 hours.


HOT WORK BY <input type="checkbox"/> Employee <input type="checkbox"/> Contractor	
DATE	JOB NUMBER
LOCATION OF WORK (BUILDING/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 .	



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
WARNING



HOT WORK IN PROGRESS! Watch for fire!

Instructions	Part 2
<p>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.</p> <p>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.</p> <p>Fire Monitor: Monitor area after post-work fire watch completion. Perform final inspection, sign and return to Permit Authorizer/Fire Safety Supervisor.</p>	<p>Required Precautions</p> <input type="checkbox"/> The fire pump is in operation and switched to automatic. <input type="checkbox"/> Control valves to water supply for sprinkler system are open. <input type="checkbox"/> Extinguishers are in service/operable. <input type="checkbox"/> Hot work equipment is in good working condition. Requirements within 35 ft. (10 m) of hot work: <input type="checkbox"/> Shield combustible construction using FM Approved welding pads, blankets and curtains. <input type="checkbox"/> Remove combustibles or shield nonremovable combustibles using FM Approved welding pads, blankets and curtains. <input type="checkbox"/> Isolate potential sources of flammable gas, ignitable liquid or combustible dust/fine (e.g., shut down equipment). <input type="checkbox"/> Remove ignitable liquid, combustible dust/fine and combustible residues. <input type="checkbox"/> Shut down ventilation and conveying systems. <input type="checkbox"/> 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. <input type="checkbox"/> 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. <input type="checkbox"/> 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 <input type="checkbox"/> Isolate equipment from service. <input type="checkbox"/> Remove ignitable liquid and purge flammable gas/vapor. <input type="checkbox"/> Remove combustible dust/fine or other combustible materials. <input type="checkbox"/> 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 <input type="checkbox"/> Perform a continuous fire watch during hot work. <input type="checkbox"/> Perform a continuous fire watch following hot work completion for 60 minutes. <input type="checkbox"/> Perform a final checkup of the area following the fire watch after hot work completion. ADDITIONAL REQUIRED PRECAUTIONS: <input type="checkbox"/> "Hot Work High-Risk Area" — perform fire monitoring following fire watch completion for 3 hours.

HOT WORK BY <input type="checkbox"/> Employee <input type="checkbox"/> Contractor	
DATE	JOB NUMBER
LOCATION OF WORK (BUILDING/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: <input type="checkbox"/> Person <input type="checkbox"/> Other	Finish Time: am/pm
Name/Other:	
Final Check:	Time: am/pm
Name:	



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WARNING!

HOT WORK IN PROGRESS
Watch for fire!


In case of emergency, call the contacts listed below before attempting to extinguish the fire.

Number
UI Campus - 911
UIHC - 195

WARNING!

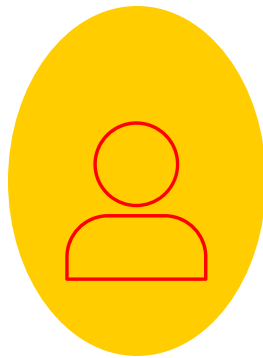
Designated Permit

UNIVERSITY of IOWA		
DEPARTMENT OF PUBLIC SAFETY		
FIRE SAFETY		
Location: Room 145	Date: September 1, 2016	Inspection Type: Designated Hot Work Site
Building: Madison Street Services Building	Bldg. # 160	Bldg. Abbrev. MSSB
Address: 640 South Madison Street		User Group: Building and Landscape Services
Facility Contact Curt Fountain		
Building Occupancy Type: Factory Industrial "F-1" (Industrial, moderate hazard)	Construction Type: IIB (Non-combustible, non-protected)	Fire Sprinkler System: YES
<p>WE HAVE INSPECTED THE ABOVE PREMISES AND FOUND:</p> <p>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.</p> <p>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.</p> <p>This space will be subject to periodical inspections by this office and any deficiencies noted may result in loss of hot work privileges.</p> <p>Type of hot work to be performed at this site:</p> <ul style="list-style-type: none"> 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 <p style="text-align: center;">THIS PERMIT WILL EXPIRE ON SEPTEMBER 8th, 2017</p> <p style="text-align: center;">Post in a conspicuous location within the hot work site</p>		
Inspected By:		
		Bruce McAvoy, Fire Safety Coordinator
University of Iowa Department of Public Safety 808 University Capitol Centre Iowa City, IA 52242-5500		

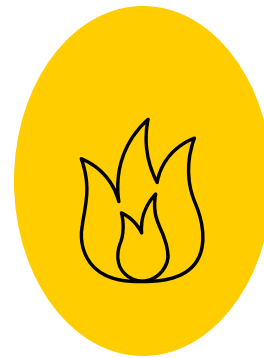
Standard Hot Work Procedures & Responsibilities



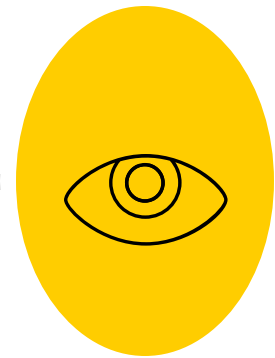
Hot Work Locations



Fire Safety Supervisor



Employee Performing the Hot Work



Fire Watch

Fire Safety Supervisor Must:

1. Question whether the Hot Work is necessary
2. Verify the location has been examined, the precautions checked on the “Required Precautions Checklist” have been taken to prevent fire.
3. Verify there is a qualified Fire Watch for the immediate area until Hot Work is completed.
4. If the Hot Work is to be conducted in a sprinklered facility, ensure that the sprinkler protection in the Hot Work area is in service.

Fire Safety Supervisor Must:

5. Sign the Hot Work Permit

*The Fire Safety Supervisor cannot be the same person performing the Hot Work.

6. Issue Hot Work Part 2 to the person performing the Hot Work, to be posted in a conspicuous location at the Hot Work site.

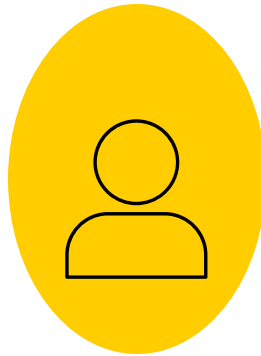
7. Fire Safety Supervisor will verify accuracy and completion of the permit, and submit to FM Occupational Fire & Life Safety Manager or UIHC Safety & Security.

8. FM, UIHC, RM and FM Global perform quarterly Hot work Audits

Standard Hot Work Procedures & Responsibilities



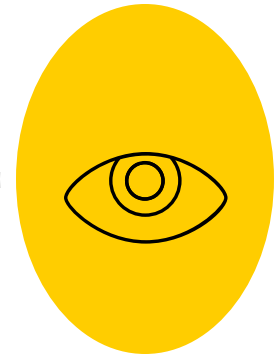
Hot Work Locations



Fire Safety Supervisor



Employee Performing the Hot Work



Fire Watch

Employee Performing Hot Work Must:

1. Use the University of Iowa Hot Work Permit
2. Inform the shift supervisor or designee of planned work activities within designated areas requiring a Hot Work Permit
3. Sign Part 1 of the Hot Work Permit as the person performing the Hot Work
4. Request signature from Fire Safety Supervisor. Must be someone different than the person performing the Hot Work.
5. Complete all required fields on Part 2 of the Hot Work Permit
6. Affix the authorized Hot Work Permit (Part 2) to a visible place in the work area.

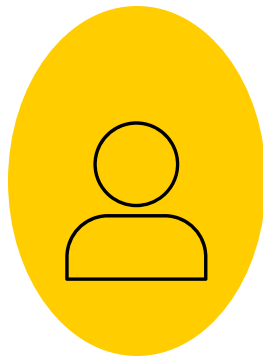
Employee Performing Hot Work Must:

7. Ensure that tools and equipment are in satisfactory condition and good repair, and the proper use of PPE
8. Protect nearby personnel and passersby against heat, sparks, etc.
9. Ensure Fire Watch is present at all times before, during, and after the Hot Work
10. Conduct the Hot Work operations
11. Stop Hot Work operations if any new hazards are introduced to the area.
12. Once the Hot Work has been completed, finish the time stamp section on Part 2

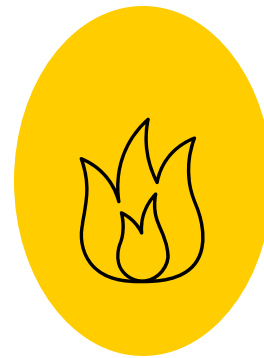
Standard Hot Work Procedures & Responsibilities



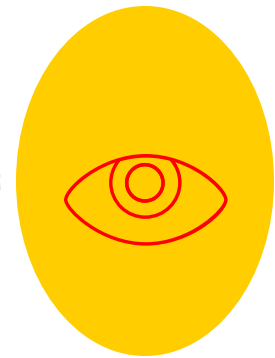
Hot Work Locations



Fire Safety Supervisor



Employee Performing the Hot Work



Fire Watch

Fire Watch

1. Inspect and monitor to ensure that safe conditions are readily and maintained during Hot Work operations.
2. The Fire Watch will have fire extinguishing equipment readily available and will be trained in its use.
3. The Fire Watch has the authority and will stop Hot Work operations if unsafe conditions develop.
4. Shall remain in the Hot Work area **during the entire period of Hot Work activities and for 60 minutes thereafter**, including any break in activity.
5. Prior to leaving area, perform final inspection, sign and time stamp Hot Work Permit Part 2
 - A. In the event that the current Fire Watch has to leave the area, Hot Work activities must cease or replace Fire Watch.
 - B. Person performing Hot Work cannot also be the Fire Watch for the same Hot Work Permit unless they are replacing the fire watch after they are done performing the Hot Work.

How to Obtain and Use a Hot Work Permit

- A. Always ask yourself – “Is there a safer alternative to Hot Work?”
 - If yes, use the safer alternative.
 - If not, continue to next step.
- B. 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).
 - University – Part 1 is kept by the Fire Safety Supervisor for reminder/notification.
 - UHIC – Part 1 is kept in the UIHC Fire Safety Office for tracking.
- E. Hot Work Permit Part 2 is given to the individual performing the Hot Work to complete and visibly post at Temporary Hot Work Site.

How to Obtain and Use a Hot Work Permit

- F. The person performs the Hot Work, with Fire Watch present
- G. After Hot Work is completed, the person performing the Hot work must complete Part 2 of the Hot Work Permit while the Fire Watch stays at the work site for 60 continuous minutes monitoring for smoldering and fire development.
- H. At the end of the 60 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 inspects the permit for accuracy and competition to identify any mistakes prior to submission
- K. J. Fire Safety Supervisor or Permit Authorizer should forward completed Permit Part 2 to:
 - University:
 - i. FM Occupational Fire & Life Safety Manager, 200 University Services Building, or
 - ii. If it is a Design & Construction Project, the construction manager
 - 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](#)

*If you would like more knowledge on Hot Work, please feel free to take the course on ICON

IOWA

Summary

- **Emphasized Standard Hot Work Procedures & Responsibilities**
- **Showed the Process to Obtain and Use a Hot Work Permit**





HAWKEYE ON SAFETY

BE SAFE AND IF IT LOOKS UNSAFE... **REACT!**

QUESTIONS

University Campus 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



Facilities Management Work Control

210 USB

(319) 335-5071

<https://www.facilities.uiowa.edu/bls/wcc.html>

facilities-wcc@uiowa.edu

Risk Management

202 PCO

(319) 335-0010

<https://uiowa.edu/riskmanagement/>

risk-management@uiowa.edu

Environmental Health & Safety

122 Grand Avenue Court

(319) 335-8501

<https://ehs.research.uiowa.edu/>

ehs-contact@uiowa.edu

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QUESTIONS

Brent Anderson

Facilities Management

(319) 335-5444

brent-anderson@uiowa.edu

Melissa Miller

Risk Management

(319) 467-1327

Melissa-miller-1@uiowa.edu



FM Safety Culture...

Planting the Safety Culture seed, growing / nourishing Safety Culture, Yielding Safety Culture

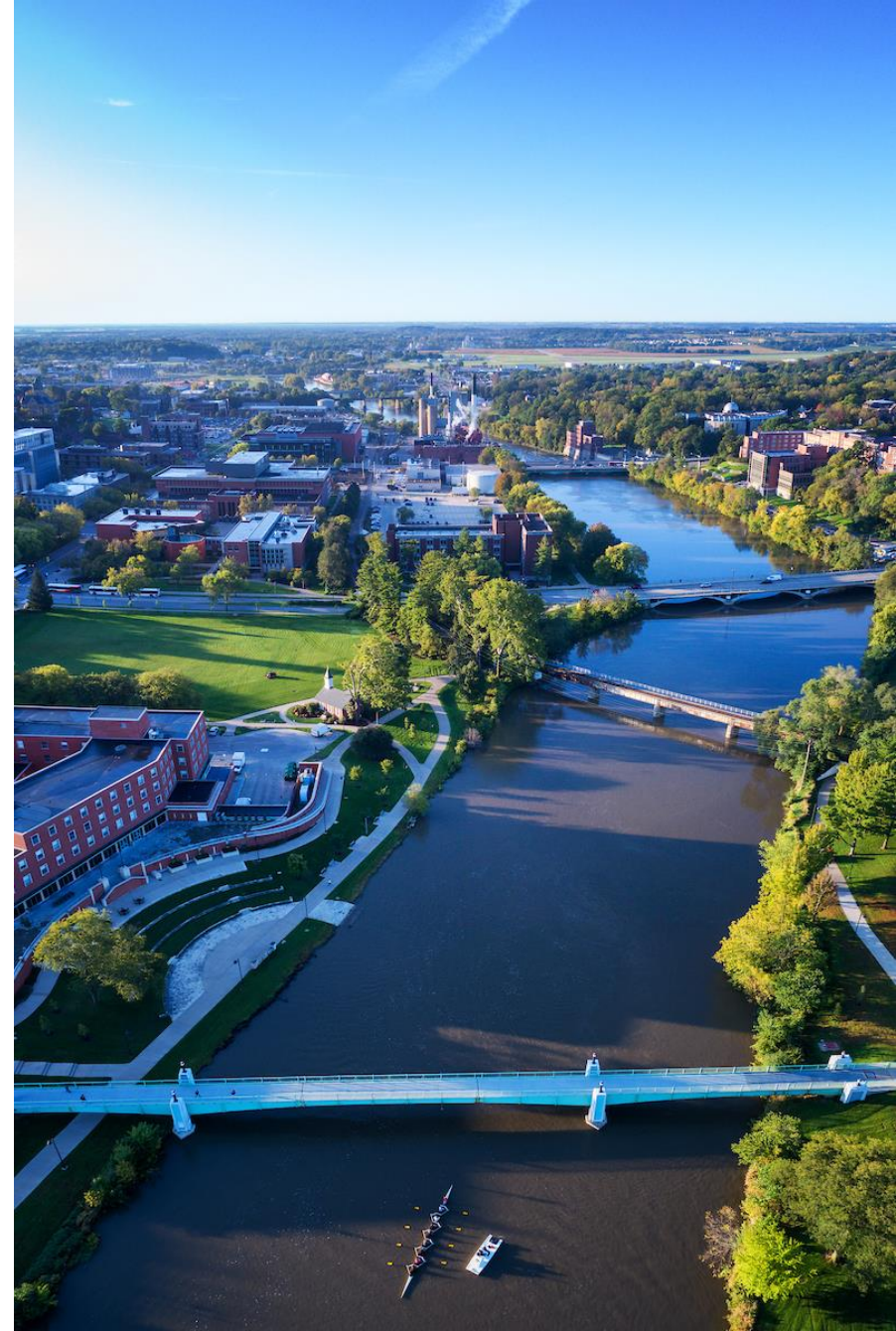
Safety Culture...

- OSHA, “Safety Culture is the environment where the attitudes, behaviors, and perceptions of all workers are reflected in the health and safety of the workplace”.
- We make Safety Culture personal. Not just in the workplace but all encompassing in everything that you do.
 - Home, Work, & Play

FM Safety Culture

→ COOPERative approach

- Leadership Commitment / Style
- Employee Empowerment / Involvement
- Teamwork / Family
- Communication
 - Constant / Continuous, Timeliness, Open / Honest
- Established Programs / Procedures
 - Compliance w/ procedures
- Reporting of all incidents, accidents, and near-misses
- Incident / accident investigations (RCFA)
- Checks / Balances
 - Audits
 - Metrics
- Investments
 - Organizational Learning / Training / Competence
 - Resources
 - PPE



Moving the Safety Culture Needle within FM

→ Metrics over the past 9 years...

- FROI (First Report of Injury) improvement of 62%
- OSHA Recordables; improvement of 60%.
- OSHA LTA (Lost Time Accident); improvement of 83%.
- OSHA Lost Days; improvement of 63%.
- OSHA Restricted Cases; improvement of 50%.
- OSHA Restricted Workdays; improvement of 72%.
- OSHA “Other Cases”; stable w/avg of 4/yr.



Safety Solutions...

Process in place to help improve safety across campus

Safety Solutions

What is Safety Solutions?

Safety Solutions is a mechanism to report safety related hazards, concerns, suggestions, and near-misses (situations that could have resulted in an incident or injury but did not).

Who can use Safety Solutions?

Any member of the University - faculty, staff, or students.

Sponsored by:

IOWA

Environmental Health
and Safety Office

IOWA

Facilities Management

IOWA

Business Services
Risk Management

IOWA

University Human Resources



Be a Voice for Safety

How to access Safety Solutions

- 1 Go to Safety Solutions at <https://bizhub.facilities.uiowa.edu/bizhub/safety/incident>
- 2 Log in with your HawkID and password.
- 3 Complete the form and submit for review.



Environmental Health and Safety

Environmental Health and Safety

BIOLOGICAL ▾ CHEMICAL ▾ LAB SAFETY ▾ OCCUPATIONAL ▾ RADIATION ▾ WASTE/ENVIRONMENTAL ▾ ABOUT US ▾

Emergencies

- Work Related Illness/Injury
- Hazardous Waste Contingency Plan
- Hazardous Materials Spills

News and Updates









- EHS Open "Office" Hours
- EHS Laboratory Safety Seminar
- SAFETYmatters Newsletter
- Accessing EHS Written Manuals and Forms

[more](#)

[Chemical Inventory EHSA](#) [Waste Pickup Request](#) [EHS Safety Training](#) [Chemwatch - SDS](#)

[OSHA Inquiries and Inspections](#) [Safety Solutions](#) [Health & Safety Policy](#)

Related UI Programs

-  [Public Safety](#)
-  [FM@YourService](#)
-  [Fire Safety](#)
-  [UI Employee Health Clinic](#)
-  [Ergonomic Assessment](#)
-  [Environmental Compliance](#)
-  [Risk Management](#)
-  [Office of Emergency Management](#)

Safety Solutions

[Home](#)

Safety Solutions

Environmental Health and Safety (EHS), in collaboration with Facilities Management (FM), Risk Management, and University Human Resources, has released **Safety Solutions**, a mechanism to report:

- safety hazards or concerns,
- suggestions to improve safety, including the safety culture, procedures, or oversight, and
- near-misses = a situation that could have resulted in an incident or injury but did not.

Any member of the University faculty, staff, or students can use Safety Solutions by accessing the link above and signing in with their HawkID. The purpose of Safety Solutions is to encourage the campus community to be an active participant in ensuring a safe and healthy campus environment.

Safety Solutions should **NOT** be used to report:

- Any incident that resulted in an injury/illness to a UI employee – use the First Report of Injury through [Employee Self Service](#)
- Any incident that resulted in an injury/illness to a non-UI employee (such as a student or volunteer) – use Risk Management's [Incident Report Form](#)
- Building or grounds maintenance – use [FM@YourService](#)
- Criminal or Emergency situations (including use of a fire extinguisher) – 911 or [Department of Public Safety](#)
- Any concerns or events relating to UIHC – report through [The Point](#)
- Anonymous reporting – use [Report a Concern](#)

Following submission of a case, a group of administrators comprised of staff from EHS and FM will review the information.

▶ [Initial Submission Information](#)

The submission will either be addressed by the administrators or may be assigned to an individual within the department for further investigation. The investigation will provide an opportunity for questions, gathering additional information, and clarification, where needed. The investigator will propose a resolution and possible action items, where appropriate.

▶ [Investigation Procedure](#)

The campus user that submitted the form will be able to see the status of their submission by logging into Safety Solutions.

- New Item: Case has been submitted.
- In Review: Case is in review.
- Pending: Case is in review with Departmental Safety Administrator.
- Final Review: Proposed solution is being reviewed by Safety Solutions Administrators.
- Approved: Case is closed.

An email will be sent to the campus user when the workflow is complete and will allow full review of any information gathered during the process and any subsequent resolutions or action plans.

Any questions or concerns with Safety Solutions should be addressed to Haley Sinn, EHS Director, at haley-williams@uiowa.edu or 319-335-9553.

Spring Into Safety

A graphic with a light blue sky background and a field of tall grass at the bottom. The text "Spring into Safety" is written in a black, cursive font. A yellow hard hat is placed over the letter 'i' in "Safety".

Spring into
Safety

14 SPRING SAFETY TIPS CHECKLIST

General Safety Tips...

- Remove any old paint cans and paint thinners, in addition to old newspapers and magazines. Your local landfill/recycling center should have a place for hazardous material drop offs to dispose of the chemical's safety.
- Consider your smoke alarms & CO Detectors. Do you have enough? Change the batteries each spring to be sure you are properly prepared. Clean the dust covers of each.
- A good time to review your emergency escape/response plan with each member of the family in the event of an emergency, (fire, weather, gas leak, etc.).
- Replace your furnace filter.
- Grease can accumulate on your stove hood. Properly clean them as it is a way to keep flames from spreading should a fire break out.
- Check all of your fire extinguishers needle indicators and dates to be sure that they are ready to utilize. Also, assess if you have enough of them and in the possible needed locations.
- Clean around your dryer. Pay close attention to any ducts or dampers to be sure that lint has not accumulated and blocked the space. Accumulations of lint can lead to a fire.
- Check all chords to prevent an electrical fire. Make sure they are not frayed and wires are not visible.

More General Safety Tips...

- Remember all aspects of ladder safety if needing to utilize them.
 - Do not use ladders in high winds or storms
 - Wear slip-resistant shoes while using.
 - Inspect the ladder before utilizing.
 - Ensure that the duty rating is more than the total weight of the climber, tools and other objects that will be placed on the ladder.
 - Choose a ladder long enough that you do not have to stand on the top rung or step. Stay off the top two rungs of a step ladder and the top three rungs of an extension ladder.
 - Your ladder should extend minimally 3' above the working surface such as a roof.
 - When using an extension ladder remember to set the ladder at the correct angle which is 4:1, (for every of ladder height you are 1' out).
 - Tie off the ladder to prevent it from slipping.
 - Be aware of any overhead or nearby electricity to not come into contact.
 - Place the ladder on firm, level ground.
 - Only allow one person a ladder at a time.
 - Do not position a ladder in front of closed doors.
 - Utilize 3-points of contact to reduce the risk of slipping or falling. Face the ladder with two hands and one foot or two feet and one hand in contact with the ladder or side rails.

Outdoor Safety Tips...

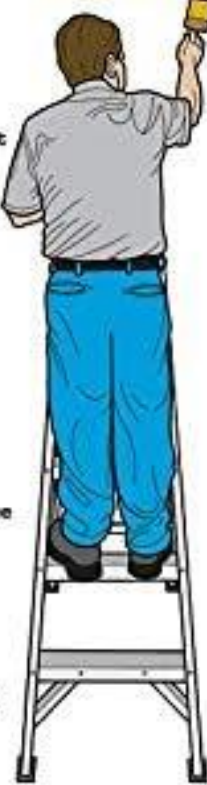
- Check outdoor cords for frays and damage.
- Check any gas-operated equipment to be sure all fuel lines are safe.
- Do not store gasoline in an open space. Be sure all equipment used for lawn equipment and outdoor purposes has been properly fueled outdoors to eliminate the risk of inhalation.
- Be cautious of chemical usage (cleaning, yard care, etc.) as they may pose numerous health hazards as well as flammability.
- Be cautious with grilling (gas/charcoal). Always keep a good distance from structures as well as inspect all items prior to use.

Ladder Safety

LADDER SAFETY


DO'S

- 1 Do maintain 3 points of contact on the step ladder:
- 2 feet & 1 hand or
- 2 hands & 1 foot
- 2 Do place the step ladder on level ground, solid and an unmoveable surface
- 3 Do face the step ladder when ascending or descending
- 4 Do stay centered on the step ladder
- 5 Do fully open the step ladder and lock supports in place
- 6 Do brace yourself with your free hand if possible
- 7 Do carry tools in a toolbelt or pouch not in your hands
- 8 Do use a step ladder with non-slip feet
- 9 Do use the right height of step ladder for the job
- 10 Do inspect the step ladder before using it



DONT'S

- 1 Don't overreach so you lose your balance and fall possibly causing severe injuries
- 2 Don't ever use the top two steps of the step ladder as it can collapse under you and lead to crippling injuries
- 3 Don't move or shift the step ladder while someone is on it
- 4 Don't place the step ladder on uneven ground, moveable objects, or a soft surface
- 5 Don't carry a heavy object or load that can cause you to lose your balance
- 6 Don't fold up and lean the step ladder against a wall or surface



ALGRA

Fire Safety



How fast does fire move? Very fast. You could have less than 2 minutes to get out safely once the smoke alarm sounds.

7 steps to practicing your escape plan

1



Draw a map of your home. Include all doors and windows.

2



Find two ways out of every room.

3



Make sure doors and windows are not blocked.

4



Choose an outside meeting place in front of your home.

5



Push the test button to sound the smoke alarm.

6



Practice your drill with everyone in the home.

7



Get outside to your meeting place.

Fire Escape Plan



Plan and practice your escape plan

Plan and practice your home escape plan with children.

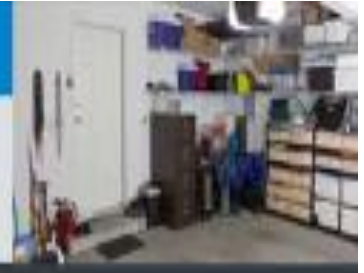


Prevent Home Garage Fires



Prevent Home Garage Fires

Prevent Home Garage Fires



Did you know?

Garage fires tend to spread farther and cause more injuries and dollar loss than fires that start in all other areas of the home.

Keep your home safe by following a few easy tips:

- 1 Store oil, gasoline, paints, propane and varnishes in a shed away from your home.
- 2 Keep items that can burn on shelves away from appliances.
- 3 Plug only one charging appliance into an outlet.
- 4 Don't use an extension cord when charging an appliance.

Garage safety through construction — install:

- 1 A 20-minute fire-rated door that is self-closing and self-latching from the garage into the house.
- 2 A ceiling made with 5/8-inch Type X gypsum board (or the equivalent) if you have living space above the garage.
- 3 A wall with 1/2-inch gypsum board (or the equivalent) if the wall attaches the garage to your home.
- 4 An attic hatch cover if you have attic access from the garage.
- 5 A heat alarm — not a smoke alarm — in your garage. The heat alarm will sound if the temperature rises too high. Learn more about what type of heat alarm is best for garage installation at www.usfa.fema.gov.

Prevent Home Electrical Fires

Prevent Home
Electrical Fires



Did you know?

Electrical malfunction is the leading cause of home fires year after year.

Share these electrical fire safety tips in your community:

- ✓ Electrical work should only be done by a qualified electrician.
- ✓ Check your electrical cords. If they are cracked or damaged, replace them. Don't try to repair them.
- ✓ Don't overload extension cords or wall outlets.
- ✓ Never use extension cords with appliances. Plug them directly into wall outlets.

Carbon Monoxide Poisoning

CARBON MONOXIDE (CO) POISONING



**CAN'T BE
SEEN**



**CAN'T BE
SMELLED**



**CAN'T BE
HEARD**



**CAN BE
STOPPED**

Smoke is Poisonous



Smoke is poisonous.

Get low to the ground and go under the smoke to your exit if you must escape through smoke.

Replace your fire alarms



Replace your alarms after 10 years.

Smoke alarms do not last forever. If your alarms are 10 years old or older, replace them with new alarms.

The infographic features a large light blue circle on a dark blue background. Inside the circle, two smoke alarm icons are positioned at the top and bottom. Two thick blue curved arrows form a circular path around the alarms. In the center of the circle, the text "10 years" is written in a large green font.

Prevent outdoor fires



Prevent outdoor fires.

Keep your fire pits, personal fireplaces and torches at least 10 feet from your home or anything that can burn.

Test your smoke alarms



**Test your smoke
alarms once a
month.**

A smoke alarm can save your life in a fire. Use the test button to make sure your smoke alarms are working.

Where to put smoke alarms



Household Chemicals

Keep Your Family Safe From Household Chemicals



Chemicals you use in your home can be dangerous to your health and the environment. To keep your family safe, follow these safety tips when you use, store or throw them out.

Use and storage tips:

- 1 Follow the instructions on the label when you use and store household chemicals.
- 2 Don't mix products. This can cause deadly gases or cause a fire.
- 3 Store products in their original containers.
- 4 Store anything that can catch on fire away from your home.
- 5 Only fill portable gasoline containers outdoors in an airy area. Make sure to place the container on the ground when you fill it.
- 6 Never store materials that can cause a fire in the sun or near an open flame or heat source.
- 7 Store these materials out of the reach of children and pets.
- 8 Use safety locks and guardrails on shelves and cabinets when you store materials. This will prevent them from falling or tipping.
- 9 Wear gloves or goggles when you use these materials.



When you need to throw them out:

- 1 Follow the instructions on the label.
- 2 Aerosol cans might contain chemicals that can burn. If you put them in the trash, they can explode or start a fire.
- 3 If you have a spill, clean the area and put the containers in an airy place. If you cannot control the spill, or are unsure about cleanup and disposal, call your local fire department.

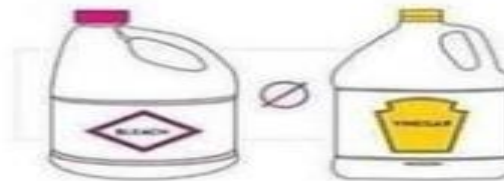


Cleaning product safety

DO NOT MIX THESE CLEANING PRODUCTS

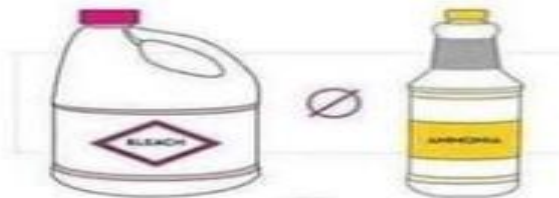
BLEACH + VINEGAR

Bleach and vinegar mixture produces chlorine gas, which can cause coughing, breathing problems, burning and watery eyes.



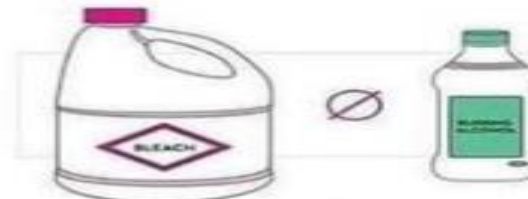
BLEACH + AMMONIA

Bleach and ammonia produce a toxic gas called chloramine. It causes shortness of breath and chest pain.



BLEACH + RUBBING ALCOHOL

Bleach and rubbing alcohol makes chloroform, which is highly toxic.



HYDROGEN PEROXIDE + VINEGAR

This combination makes peracetic/ peroxyacetic acid, which can be highly corrosive



Building Coordinator



Next meeting:

May 15, 2024, via zoom 11 AM to 12 PM

Proposed Agenda:

Design and Construction

FM Alerts

Questions?
THANK YOU!

Feedback welcome by emailing stephanie-rourke@uiowa.edu