



UNIVERSITY OF WYOMING

Hot Work Permit Program



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Hot Work Permit Program

I. INTRODUCTION

The University of Wyoming (UW) is committed to protecting the health and safety of students, employees, faculty, and volunteers at the various UW facilities. Therefore, it is UW's policy to implement a hot work permit program to minimize harm to the University of Wyoming (UW) employees, students, visitors and property and to help ensure compliance with 29 CFR 1910.252.

II. PURPOSE

The purpose of this hot work permit program is to outline procedures, training, and work practices to allow UW personnel and contractors to complete hot work activities without adverse incidents.

III. SCOPE

This program applies to UW personnel located at the Laramie, Wyoming campus, regional campuses, UW Agriculture Research and Extension Centers, and other related facilities and operations. This program outlines minimum procedures, training, equipment, and work practices that, if followed, will help prevent incidents to UW employees, students, visitors, and property.

IV. DEFINITIONS

- A. Designated Area – a location designed for or approved by a competent person (for example, Safety Specialist or a designated Supervisor) for hot work operations to be performed regularly (for example, Operations Welding Shop). Hot work in a designated area does not require a permit.
- B. Designated Supervisor – acts as a permit authorizing individual. The permit authorizing individual must be an individual who is knowledgeable of the hot work activities. This person may be the hot work operator's supervisor or an individual of equivalent or higher status.
- C. Fire Watch – ensures safe conditions are maintained at the hot work site. Has received training on the hot work permit program and fire extinguishers.
- D. Hot Work – work involving burning, welding, or a similar operation that is capable of initiating fires or explosions.
- E. Hot Work Permit – a document signed by the designated supervisor for the purpose of authorizing a specified hot work activity (see Appendix A).



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- F. Hot Work Operator – a trained individual authorized by the designated supervisor to perform hot work.

IV. IMPLEMENTATION

For specific information related to procedures, please reference the Standard Operating Procedure (SOP) specific to that process.

A. Responsibilities

- 1. University of Wyoming (UW)

UW is responsible for ensuring the safety of its personnel and compliance with applicable Federal, State, and Local regulations, standards, and codes. UW is also responsible to provide support and resources for the implementation of this program including equipment, training, and PPE.

- 2. UW Safety Office

The UW Safety Office is responsible for maintaining the written hot work permit program, monitoring the program, and revising the program as necessary with input from stakeholders. Additionally, the UW Safety Office will provide training and consultation as necessary; investigate and document reported incidents related to hot work; and review/revise the program on a periodic basis.

- 3. Department Director/Manager

UW Department Directors and Managers are responsible for implementing the requirements of this program; designating Supervisors to implement hot work requirements and processes; ensuring their personnel are properly trained and understand the hot work permit program requirements and processes; and designating areas established for hot work activities where the potential fire danger is limited.

- 4. Designated Supervisor

The Designated Supervisor is responsible for implementing the requirements of this program for work areas within their area of supervision; ensuring the precautions listed on the hot work permit are understood by the Hot Work Operator and Fire Watch; ensuring there is



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sufficient local ventilation provided to minimize exposure to smoke, fume, and particulates; selecting appropriate PPE for their personnel; reviewing and signing written hot work permits; ensuring a Fire Watch is assigned when required by the hot work permit; and filing completed hot work permits and providing copies to the UW Safety Office.

5. Hot Work Operator

The Hot Work Operator is responsible for attending and successfully completing hot work and fire extinguisher training; maintaining hot work equipment in safe operating condition; obtaining written approval from a Designated Supervisor before hot work begins; using appropriate PPE while performing hot work (for example, eye protection, gloves, welding jackets); posting the approved hot work permit and warning signs (See Appendices A and B) at the work location; ceasing hot work operations if unsafe conditions develop; contacting the Designated Supervisor if conditions become unsafe or warrant reassessment during the hot work task; and returning the completed hot work permit to the Designated Supervisor.

6. Fire Watch

The Fire Watch is responsible for attending and successfully completing hot work and fire extinguisher training; notifying other personnel in the area of the hot work operations; ensuring safe conditions are maintained during the hot work activity; ensuring fire-extinguishing equipment is readily available and trained in its use; extinguishing fires (if the Fire Watch feels they can safely do so) or immediately sound the fire alarm, evacuate the area, and call 911; maintaining a fire watch for at least 30 minutes after the hot work is completed; and using the appropriate PPE.

7. Project Managers

Project Managers are responsible for informing other employers (for example, contractors) working in the vicinity of UW hot work operations of the hazards and necessary precautions and coordinating hot work operations with the contractor, when both University personnel and contract employees will be working in or near a hot work area.



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B. Personal Protective Equipment (PPE)

Personnel performing hot work must wear appropriate PPE. This PPE shall include eye protection (for example, goggles, welding helmets, face shields and/or safety glasses) and fire resistant clothing (for example, non-synthetic clothing, welding jacket, leather gauntlet gloves).

C. Training

Hot work permit and fire watch training shall be made available to UW personnel associated with hot work operations including Supervisors and Managers. This training shall be completed:

1. Before the employee is first assigned duties related to hot work permit operations;
2. Whenever there is a change in hot work operations that presents a hazard about which an employee has not previously been trained;
3. To ensure personnel understand the use of equipment, tools, and PPE;
4. When UW updates or revises the UW Hot Work Permit Program;
5. Whenever UW has reason to believe either there are deviations from the hot work permit procedures or that there are inadequacies in the employee's knowledge or use of these procedures.

Personnel completing the training must demonstrate proficiency regarding the duties required by this Hot Work Permit Program.

UW will certify the training has been accomplished. The certification will contain the employee's name; the name, signatures, or initials of the trainer(s); and training dates.

D. Recordkeeping

Hot work permits shall be returned to the Designated Supervisor and a copy (scanned is acceptable) sent to Safety Office. Permits must be maintained for a minimum of one year by the department. Periodically, the permits should be reviewed to determine program effectiveness (refer to Appendix C).

V. PROGRAM REVIEW

This hot work permit program will be reviewed periodically to determine its effectiveness. The review may include information from hot work incidents, unsafe conditions, injury records, worker's compensation records, training records, or other information that may be helpful with the program review. The program review will be completed by the UW Safety Office.



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VI. REFERENCES

29 CFR 1910.252, Welding, Cutting, and Brazing

ANSI Z49.1-2005, *Safety in Welding, Cutting, and Allied Processes*

NFPA 51B: *Standard for Fire Prevention During Welding, Cutting, and Other Hot Work*, 2009 Edition.



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Appendix A: Hot Work Permit Program Permit Form

Hot Work Permit		Permit No.:
<input type="checkbox"/> There are no safer ways of effectively/efficiently doing this job.		
Instructions 1. Person doing hot work: Indicate time started and post permit at hot work location. After hot work, indicate time completed and leave permit posted for Fire Watch. 2. Fire Watch: Prior to leaving area, do final inspection, sign, leave permit posted and notify Permit-Authorizing Individual. 3. Monitor: Do final inspection at end of monitoring period. Sign and return to Permit-Authorizing Individual.		Required Precautions Checklist (must be retained as record of hot work activity)
Who, When, and Where? Hot Work Being Done By <input type="checkbox"/> Employee <input type="checkbox"/> Contractor Name of Person Doing Hot Work: _____ Date: _____ Job/Work Order Number: _____ Location/Building and Floor: _____ Description of Job: _____ I verify the above location has been examined, the precautions checked on the Required Precautions Checklist have been taken to prevent fire, and permission is authorized for work. Signature of Permit-Authorizing Individual: _____ Time Started: _____ Time Finished: _____ Expiration Date: _____ Expiration Time: _____ Work area and all adjacent areas to which sparks and heat might have spread were inspected during the fire watch period and there were no signs of fire or smoldering materials. Time: _____ Signature of Fire Watch: _____ _____ _____ Hours following hot work that work area was monitored with no signs of fire or smoldering materials. Time: _____ Signature of Fire Monitor: _____ _____ _____		
		<input type="checkbox"/> Available Sprinklers, hose streams, and extinguishers are in service/operable <input type="checkbox"/> Hot Work equipment in good repair Requirements within a 11 m (36 ft.) "sphere" of work: <input type="checkbox"/> Combustible dust or lint-producing equipment shut down <input type="checkbox"/> Conveyors, suds, blowers, and other equipment capable of transporting sparks or burning materials isolated or shut down <input type="checkbox"/> Combustible/flammable materials removed, including dust, lint, oil deposits (from all surfaces), packaging or stored materials, and flammable/combustible liquids <input type="checkbox"/> Explosive atmosphere in area eliminated <input type="checkbox"/> Floor swept clean <input type="checkbox"/> Combustible floor wet down, covered with damp sand or fire-resistant sheets <input type="checkbox"/> Remove other combustibles where possible. Otherwise protect with fire-resistant tarpaulins or metal shields <input type="checkbox"/> All wall and floor openings covered <input type="checkbox"/> Fire-resistant tarpaulins suspended beneath work Work on walls/ceilings or enclosed equipment: <input type="checkbox"/> Construction is non-combustible. No combustible covering or insulation <input type="checkbox"/> Combustibles on other side of walls moved away <input type="checkbox"/> Enclosed equipment cleaned of all combustibles <input type="checkbox"/> Containers purged of flammable liquid/vapors Fire watch/hot work area monitoring requirements: <input type="checkbox"/> Minutes after work is completed, including all coffee or lunch breaks, that Fire Watch will be provided. <input type="checkbox"/> Fire watch is supplied with suitable extinguishers and/or charged small hose <input type="checkbox"/> Fire watch is trained in the use of this equipment and in sounding alarm <input type="checkbox"/> Include additional watch for adjoining areas, above, or below <input type="checkbox"/> Hours after job is completed that hot work area will be periodically inspected/monitored Other precautions taken: <input type="checkbox"/> Confined Space or Lockout/Tagout permit completed if needed <input type="checkbox"/> Area smoke or heat detection has been disabled if present <input type="checkbox"/> Other: _____
		WARNING! HOT WORK IN PROGRESS WATCH FOR FIRE! IN CASE OF AN EMERGENCY CALL: _____ AT: _____ WARNING!
Rev. 10/2019		Global Risk Consultants



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Appendix B: Hot Work Operations Warning Sign

WARNING!

HOT WORK IN PROGRESS

WATCH FOR FIRE!

IN CASE OF EMERGENCY: CALL 911

UW SAFETY OFFICE: 307-766-3277

UW POLICE DEPARTMENT: 307-766-5179

HOT WORK IN PROGRESS

WATCH FOR FIRE!

WARNING!



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Appendix C: Hot Work Program Review Checklist

Department/Building/Shop: _____ Date: _____

Designated Supervisor: _____ Review Performed by: _____

A. General	Y	N	N/A	COMMENTS
1. Welding and cutting operations restricted to authorized employees				
2. Designated hot work areas are fire safe				
3. Hot work permits used for hot work outside of designated areas				
4. Fire watch used in permit areas				
5. Sufficient listed or approved fire resistant shields (i.e., curtains, blankets, pads) are available				
6. Appropriate fire extinguishers provided in vicinity of hot work				
7. Building sprinkler systems operational				
8. Local or general exhaust ventilation adequate				
9. Appropriate personal protective equipment provided and used				
10. Air monitoring performed when explosive or toxic air contaminants are potentially present				
11. Recordkeeping is up to date				
12. Hot work equipment is in good working condition				
B. Confined Spaces	Y	N	N/A	COMMENTS
1. Safe procedures followed for hot work in confined spaces				
2. Ventilation and/or respiratory protection provided and used				
3. Welding cylinders and cutting equipment left outside confined space				
4. Electrodes removed from holders and/or gas supply shut off when operations are suspended for any substantial period (i.e., lunch)				
5. Air monitoring performed				



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C. Compressed Gas Cylinders	Y	N	N/A	COMMENTS
1. Oxygen and fuel gas cylinders segregated (i.e., 20 feet apart or 5 foot fire wall) while in storage with protective valve caps in place				
2. Regulators compatible with gas cylinder				
3. Cylinder carts used for transport				
4. Cylinders secured				
5. Empty or unused gas cylinders safely stored and returned to supplier.				
D. Training	Y	N	N/A	COMMENTS
1. Workers trained in use of welding and cutting equipment, material hazards, and UW Hot Work program.				
2. Personal protective equipment training provided				
3. Confined space entry training provided				
4. Fire extinguisher training received within 1 year				



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Appendix D: Hot Work Program Review Checklist

