



UNIVERSITY OF WYOMING

Hot Work Permit Program



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I. INTRODUCTION

The University of Wyoming (UW) is committed to protecting the health and safety of students, employees, faculty, visitors, volunteers, and contractors at the various UW facilities. Therefore, it is UW's policy to minimize hot work related hazards by implementing this Hot Work Program. This Hot Work Program intends to be compliant with the Occupational Safety and Health Administration's (OSHA) Welding, Cutting, and Brazing Standard found at 29 CFR 1910.252 as incorporated by reference by the Wyoming Department of Workforce Services, OSHA General Industry 1910, Chapter 17, Welding, Cutting, Brazing, Subpart Q.

II. PURPOSE

The purpose of this Hot Work Permit Program is to outline minimum procedures, training, equipment, and work practices to help prevent adverse incidents to UW personnel, students, faculty, visitors, contractors, and property.

III. SCOPE

This Hot Work Program applies to UW personnel and contractors conducting hot work at UW owned or leased facilities. This program includes activities involving hot work defined in the following sections.

IV. DEFINITIONS

Designated Area – a location designed for, or approved by, a competent person (for example, a Safety Specialist or designated Supervisor) for hot work operations to be performed regularly (for example, UW Operations Welding Shop). Hot work in designated areas does not require a permit.

Designated Supervisor – acts as a permit authorizing individual. The Designated Supervisor 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.

Fire Watch – ensures safe conditions are maintained at the hot work site. The Fire Watch has received training regarding this Hot Work Permit Program and fire extinguishers.

Hot Work – work involving burning, welding, cutting, brazing, or a similar operation that is capable of initiating fires or explosions.

Hot Work Permit – a document signed by the designated supervisor for the purpose of authorizing a specified hot work activity (See Appendix A).

Hot Work Operator – a trained individual authorized by the Designated Supervisor to perform hot work.



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V. IMPLEMENTATION

A. Responsibilities

1. University of Wyoming (UW)
 - a. Ensure the personnel safety and comply with applicable Federal, State, and Local standards, regulations, and codes.
 - b. Provide support and resources to implement the UW Hot Work Permit Program including tools, training, and personal protective equipment (PPE).
2. UW Safety Office
 - a. Maintain the written Hot Work Permit Program, monitor the program, and revise the program as necessary.
 - b. Provide training and consultation as necessary.
 - c. Investigate and document reported incidents related to hot work activities.
 - d. Review and revise the program on a periodic basis.
3. Department Head/Director
 - a. Designate Supervisors to implement hot work requirements and processes.
 - b. Ensure personnel engaged in hot work activities are properly trained and understand the hot work permit program requirements and processes.
 - c. Designate areas established for hot work activities where the potential fire danger is limited.
4. Designated Supervisor
 - a. Implement the Hot Work Permit Program for work areas under their control.
 - b. Ensure the precautions listed on the Hot Work Permit are understood by the Hot Work Operator and Fire Watch.
 - c. Ensure there is sufficient local exhaust ventilation provided to minimize exposure to smoke and fume.



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- d. Select appropriate PPE for their personnel.
 - e. Review and sign written hot work permits.
 - f. Ensure a Fire Watch is assigned when required by the Hot Work Permit.
 - g. File completed hot work permits and provide copies to the UW Safety Office.
 - h. Notify other personnel and other employers (for example, contractors) in the area of the hot work operations and any precautions they may need to take.
 - i. Coordinate hot work operations with the contractor, when both UW personnel and contractor personnel will be working in or near a hot work area.
5. Hot Work Operator
- a. Attend and successfully complete required hot work and fire extinguisher training.
 - b. Maintain hot work equipment in safe operating condition.
 - c. Obtain written approval from a Designated Supervisor before hot work begins.
 - d. Use appropriate PPE while performing hot work.
 - e. Post the approved Hot Work Permit and warning signs at the hot work location.
 - f. Cease hot work operations if unsafe conditions develop.
 - g. Contact Supervisor if conditions become unsafe or warrant reassessment during the hot work task.
 - h. Return the completed Hot Work Permit to the Designated Supervisor.
 - i. Have fire-extinguishing equipment readily available and be trained in its use.
 - j. If you feel you can safely do so, extinguish fires when they are obviously within the capacity of the available fire extinguisher. If a fire is beyond the capacity of the fire extinguisher or you do not feel safe to do so, immediately sound the fire alarm, evacuate the area, and call 911.



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6. Fire Watch
 - a. Attend and successfully complete hot work and fire extinguisher training.
 - b. Ensure safe conditions are maintained during the hot work activity.
 - c. If you feel you can safely do so, extinguish fires when they are obviously within the capacity of the available fire extinguisher. If a fire is beyond the capacity of the fire extinguisher or you do not feel safe to do so, immediately sound the fire alarm, evacuate the area, and call 911.

B. Personal Protective Equipment

Personnel performing hot work shall wear appropriate PPE. PPE includes, but is not limited to, 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 will be made available to UW personnel associated with hot work operations. This training will be provided by either a classroom style or an online format. Topics to be covered include a review of the UW Hot Work Permit Program; types of hot work; hazards associated with hot work; lower explosive limit (LEL) and upper explosive limit (UEL); monitoring for combustible atmosphere; welding on containers or tanks that have contained flammable/toxic materials; Hot Work Permit procedures; PPE, and recordkeeping.

D. Recordkeeping

Hot Work Permits shall be returned to the Designated Supervisor and a copy sent to the UW Safety Office. Permits must be maintained for a minimum of one year by the department.

Training records will be tracked using the UW computerized learning management system.

VI. EVALUATION

This Hot Work Permit Program will be evaluated periodically to review effectiveness and if adjustments and changes are warranted.



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VII. REFERENCES

29 CFR 1910.252

Wyoming Department of Workforce Services. OSHA General Industry 1910. Chapter 17: Welding, Cutting, and Brazing – Subpart Q.

American National Standards Institute (ANSI) Z49.1:2012. *Safety in Welding, Cutting, and Allied Processes.*

National Fire Protection Association (NFPA) 51B – 2019. *Standard for Fire Prevention During Welding, Cutting, and Other Hot Work.*



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Appendix A: Hot Work Permit

A Hot Work Permit is required for operations involving open flames or producing heat and/or sparks outside of a designated hot work area. The Hot Work Permit must be authorized by a Designated Supervisor and posted at the hot work site. File the finished permit in your department and forward a copy to UW Safety (454 Hill Hall). Phone: (307) 766-3277, Email: uwehs@uwyo.edu.

If the required precautions cannot be satisfied, hot work is not permitted.

Hot Work Date:	Work Order # (if applicable):
Location (building, floor, room #):	Name(s) and department(s) of Hot Work Operator(s):

Description of hot work and special precautions:

Authorization

This permit is valid for the pre-designated time period listed below and only so long as safe work conditions exist. It expires on any change in condition that adversely affects safety in work area. Multi-day permits require a safety walkthrough at least once a day.

Designated Supervisor Name (print) : _____ **Signature:** _____

Start Date and Time: _____ **Expiration Date and Time:** _____

Precautions Checklist

General

- | YES | NO | N/A | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Hot work operator, Fire Watch, and Designated Supervisor are familiar with the UW Hot Work Program. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Hot work equipment is in good working condition. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Workers are fitted with appropriate safety equipment. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Hot work area is adequately ventilated. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Workers know the locations of the fire alarm and firefighting equipment. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fire detection and/or sprinkler system is in service. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm has been silenced. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Hot work permit and warning sign are posted on site. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Other potentially affected persons (i.e., contractors, occupants) have been notified. |

Requirements within 35 ft. (11m) of work

- | YES | NO | N/A | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Combustibles and flammables within 35 feet of work are removed or protected with appropriate shielding. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Floor and wall openings are covered or sealed with non-combustible material. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Duct and conveyor systems are shielded, shut down or both. |

Work near walls or ceilings

- | YES | NO | N/A | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Construction is noncombustible and without combustible covering or insulation. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Combustibles adjacent to walls (on both sides) are removed. |

Work on and near enclosed equipment

- | YES | NO | N/A | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Enclosed equipment cleaned of all combustibles. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Containers purged of flammable liquids and vapors; combustible gas monitoring performed. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fume hoods cleared by UW Safety. |

Final inspection (to be performed after work is completed)

- | YES | NO | N/A | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm was reactivated. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Hot work area was inspected 30 minutes after hot work was completed. |



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!



Appendix C: Hot Work Permit Process

