

**Western Kentucky University
Environmental Health & Safety**



**WESTERN
KENTUCKY
UNIVERSITY**

**HOT WORK PERMIT
PROGRAM**

2005

A. PURPOSE AND SCOPE

1. **PURPOSE:** The purpose of this program is to establish written procedures to prevent fires resulting from any temporary operation involving open flames or producing heat and/or sparks, as required by OSHA 29 CFR 1910.252, 29 CFR 1926.352 and NFPA Standard 51B. This includes, but is not limited to: brazing, cutting, grinding, soldering, thawing pipes, torch applied roofing and welding.
2. **SCOPE:** This program applies to work performed by Western Kentucky University employees and contractors performing work in University buildings. This program does not apply to areas that are specifically designed and equipped for such operations. The designated areas in the Department of Facilities Management are: Auto Shop, Carpentry Shop, Grounds Crew Shop, Heat Plant Shop, HVAC Shop and the Welding Shop.

B. HOT WORK PERMIT PROCEDURES

1. Hot work should not be performed if the work can be avoided or performed in a safer manner. When practical, objects to be welded, cut or heated must be moved to a designated safe location, i.e. maintenance shops.
2. If hot work must be performed, a Hot Work Permit must be obtained before the work begins. The procedure is as follows:
 - a. Workers must inspect the work area for code compliance and have the appropriate manager/supervisor fill out the permit.
 - b. Contractors on campus must have the project manager fill out the permit and inspect the work area for code compliance. Note: Fire Safety Officer may be contacted for advice and guidance when necessary.
 - c. Permits will be issued for no more than one week at a time according to the nature of the work being performed. One permit will be issued for each function being performed (for example: one permit would be issued for welding in the area and another permit would be issued for torching a roof in that same area).
 - d. The DFM Electronics Shop and/or WKU Environmental Health and Safety (EH&S) must be notified so that it can be determined if it is necessary to de-activate a zone or a detector within the fire alarm system while work is being performed in order to prevent a false alarm. The building fire alarm system will not be disabled.
 - e. WKU Police must be notified when and where the hot work will be taking place and that a proper fire watch will be provided if the alarm system is down.

3. All precautions on the Hot Work Permit must be met before hot work begins. The permit includes a safety check-off list.
4. The Hot Work Permit is good only for the date(s) and time specified on the permit. A copy of the permit must remain at the hot work location. When hot work is completed, a copy of the permit should be sent to EH&S for record keeping purposes
5. All personnel (employees, contractors, building occupants) must be suitably protected against hazards generated by the work - i.e. heat, sparks, fumes, welding rays, etc. This may include, but is not limited to, the use of personal protective equipment, shields, screens, or local exhaust ventilation.
6. A fire watch will be required whenever:
 - a. The fire alarm in the work zone has been de-activated during hot work;
 - b. Appreciable combustible material in building contents or construction is closer than 35 feet to the point of operation;
 - c. Appreciable combustibles are more than 35 feet away but are easily ignited by sparks;
 - d. Combustible materials are likely to be ignited by conduction or radiation from metal partitions, roofing or other conductive materials.

C. HOT WORK PERMIT - PROHIBITED CONDITIONS: A Hot Work Permit Will Not Be Issued If Any Of The Following Exists:

1. Sprinkler protection is impaired;
2. Appropriate fire fighting equipment is not readily available;
3. Combustible or flammable materials are within 35 feet and cannot be moved or protected;
4. Floor and wall openings cannot be covered;
5. Flammable and/or explosive vapors or gases are present,
6. Cutting or welding on pipes or other metals can conduct enough heat to ignite nearby combustible materials;
7. Any condition exists that could create hazards by performing the work; or

8. Any area not authorized by management.

D. RESPONSIBILITIES

1. MANAGER RESPONSIBILITIES:

- a. Ensure that supervisors, cutters, welders and employees using other hot work equipment are suitably trained in the operation of the equipment including all safety requirements and hot work procedures;
- b. Issue hot work permits and ensure that supervisors, employees and contractors are following the hot work permit program.
- c. Establish areas for cutting and welding, i.e. maintenance shops.

2. SUPERVISOR RESPONSIBILITIES:

- a. Ensure that a hot work permit is obtained prior to the start of work;
- b. Ensure that all cutting and welding equipment is in satisfactory condition and in good repair, and
- c. Ensure that employees are suitably trained in the operation of the equipment and safe use of the process.

3. EMPLOYEE RESPONSIBILITIES:

- a. Follow and use hot work procedures;
- b. Obtain a hot work permit prior to any work and display at job site;
- c. Ensure that all cutting and welding equipment is in satisfactory condition and in good repair;
- d. Attend and actively participate in training sessions; and
- e. Protect nearby personnel against heat, sparks, etc. when working in occupied buildings.

4. FIREWATCHER RESPONSIBILITIES:

- a. Have fire extinguishing equipment readily available (contractors must supply their own fire extinguishers) and be trained to use it;
- b. If a fire occurs, try to extinguish it if it is within the capacity of the equipment at hand. Be familiar with the facility and know how to activate

the fire alarm system;

- c. Watch for fires in all exposed areas;
- d. Maintain fire watch for one half hour after hot work is completed.

5. DEPARTMENT OF ENVIRONMENTAL HEALTH AND SAFETY RESPONSIBILITIES:

- a. Retain records of hot work permits issued;
- b. Provide technical assistance as needed;
- c. Provide assistance in training supervisors and employees.

WKU HOT WORK PERMIT

Date Work Begins: _____ Date Work Ends: _____

Location and Building _____

Nature of Job: _____

Workers Performing Hot Work: _____

Signature of Supervisor/Manager: _____

Signature of Contractor _____

Precautions:	Yes	No	N/A
Sprinklers in service	_____	_____	_____
Equipment in good repair	_____	_____	_____
Precautions Within 35' of Work			
Floors free of combustibles	_____	_____	_____
Combustible floors protected	_____	_____	_____
Flammable liquids removed or protected	_____	_____	_____
Explosive atmosphere in area eliminated	_____	_____	_____
All walls and floor openings covered	_____	_____	_____
Fire resistant coverings under work	_____	_____	_____
Work on Walls or Ceilings:			
Construction is non-combustible	_____	_____	_____
Combustibles moved away from opposite side of the work wall	_____	_____	_____
Work on enclosed equipment:			
Enclosed equipment cleared of all combustibles	_____	_____	_____
Containers purged of flammable liquids	_____	_____	_____
Fire Watch:			
Fire watch will be provided during and 30 minutes after job is completed	_____	_____	_____
Fire watcher is trained in use of fire extinguisher and alarm	_____	_____	_____
Fire watcher shall supply own fire extinguisher	_____	_____	_____

Comment or Special Instructions: _____
