

HOT WORK PERMIT PROGRAM

2016

Western Kentucky University Department of Environmental, Health & Safety

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: University Fire Marshal 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 Environment, 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 the University Fire Marshal, Department of 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. PROHIBITED CONDITIONS

A Hot Work Permit Will Not Be Issued If Any of the Following Exists:

- 1. Sprinkler protection is impaired;
- 2. Appropriate firefighting 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:

- 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.
- 2. Establish areas for cutting and welding, i.e. maintenance shops
- 3. The University Fire Marshal and WKU police must be notified of the Hot Work permit issued and provide the start and finish time and date.

4. 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.

5. 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.

6. FIRE WATCH RESPONSIBILITIES:

- a. Have fire extinguishing equipment readily available (contractors must supply their own fire extinguishers) and be trained how 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 three (3) hours after hot work is completed.

7. 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.

HOT WORK PERMIT

Western Kentucky University

Date Work Begins:			Date Work Ends:			
Location and	Building:					
Nature of Job:						
Workers Performing Hot Work:						
Signature of Supervisor/Manager:						
Signature of Contractor:						
General Precautions:				Yes	No	N/A
Sprinklers in service				105	110	1,1/2.1
Equipment in good repair						
Fire alarm system has been disabled or isolated						
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Precautions Within 35' of Work				Yes	No	N/A
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:				Yes	No	N/A
Construction is non-combustible						
Combustibles moved away from opposite side of the work wall						
Work on enclosed equipment:				Yes	No	N/A
Enclosed equipment cleared of all combustibles						
Containers purged of flammable liquids						
Fire Watch:				Yes	No	N/A
Fire watch will be provided during and 3Hours after the job is				105	110	11/11
completed						
Fire watch personal are trained in use of fire extinguisher and fire alarm						
activation						
Contractor shall supply own fire extinguisher						
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Comment or Special Instructions:						
Notify WKU Fire Marshal and WKU Police before hot work begins.						

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University Fire Marshal – Bob Austin Phone: 745-2931 Fax: 745-5037 Revised: April 2016