# Washington University School of Medicine

# HOT WORK PERMIT PROCEDURE
# June 16, 2008

## POLICY

This procedure is written to specify the approval process for a temporary operation involving open flames, heat and/or sparks on the Washington University School of Medicine Campus. This includes, but is not limited to, operations such as brazing, cutting, grinding, soldering, torch-applied roofing and welding.

## TERMS

FMD refers to the Facilities Management Department for the Medical School Campus. FMD includes Design & Construction and Facilities Engineering.

### ATTACHMENTS

1. "Hot Work Permit," Form 2630, Factory Mutual Engineering

2. "Brazing, Cutting, and Welding Activity Log."

### RESPONSIBILITES:

1. For projects performed through the **Design and Construction Department (FMD)**, the Project Manager is responsible for ensuring the contractor secures a hot work permit.

2. For projects performed through the **Facilities Engineering Maintenance Department (FMD)**, the Facilities Engineering Maintenance Supervisor is responsible for ensuring the worker or contractor secures a hot work permit.

### PROJECTS MANAGED BY FACILITIES ENGINEERING MAINTENANCE

3. When a Facilities Engineering worker has identified a job triggering requirements for hot work, that individual is responsible for contacting their Supervisor or a designated personnel within the Controls Group in order to receive a "Hot Work Permit" prior to the beginning of the hot work. **Note: A 24 hour notification is necessary if hot work is to be done on fire suppression or alarm systems.** The worker and the Supervisor will follow the guidelines outlined in the Washington University School of Medicine Hot Work Permit Procedure and a complete FM2360 "Hot Work Permit, part one (Appendix A). The worker will also complete a Daily Instructions, Hot Work Permit, part two. For cutting, welding and brazing we recommend a Cutting, Welding and Brazing Activity Log be maintained, (Appendix B). The Supervisor will also provide the worker with a copy of the City of St. Louis, Dept. of Public Safety Division of Fire & Fire Prevention Permit.

4. When a Contractor working for **Facilities Engineering** has identified a job as triggering requirements for hot work practices, that Contractor is responsible for contacting the appropriate Supervisor at their respective offices/phone numbers, in order to receive a "Hot Work Permit" prior to the beginning of the hot work. **Note: A 24 hour notification is necessary if hot work is to be done on fire suppression or alarm systems.** The Contractor and the Supervisor will follow the guidelines outlined in the Washington University School of Medicine Hot Work Permit Procedure and a complete FM2360 "Hot Work Permit, part one (Appendix A). The worker will also complete a Daily Instructions, Hot Work Permit, part two. For cutting, welding and brazing we recommend a Cutting, Welding and Brazing Activity Log be maintained, (Appendix B). The Supervisor will also provide the worker with a copy of the City of St. Louis, Dept. of Public Safety Division of Fire & Fire Prevention Permit if the project is in the City of St. Louis.

## PROJECTS MANAGED BY DESIGN & CONSTRUCTION

1. When a Contractor working for **Design & Construction** has identified a job as triggering requirements for hot work practices, that Contractor is responsible for contacting their Project Manager in Design & Construction at their respective offices/phone numbers, in order to receive a "Hot Work Permit" prior to the beginning of the hot work. **Note: A 24 hour notification by the contractor to Bill Ditchburn or Gene Largent in Facilities Engineering (362-3100) is necessary if hot work is to be done on fire suppression or alarm systems.** The Contractor and the Project Manager or Supervisor will follow the guidelines outlined in the Washington University School of Medicine Hot Work Permit Procedure and a complete FM2360 "Hot Work Permit, part one (Appendix A) and Daily Instructions, Hot Work Permit, part two. For cutting, welding and brazing we recommend a Cutting, Welding and Brazing Activity Log be maintained, (Appendix B).

2. Designated Facilities Engineering personnel should attend Pre-Construction meetings to determine if what kind of work will take place on the project and to also determine if there are any fire alarm devices that need to be protected during the project or will need to be bypassed during the construction project.

3. Designated personnel in Design and Construction and Facilities Engineering will evaluate the request for hot work and provide the Factory Mutual Hot Work Permit, Form 2630, to the contractor or WUSM employee after reviewing the mandatory requirements of the Hot Work Permit with the requesting contractor.

## OVERSIGHT RESPONSIBILITY

Design & Construction, Facilities Engineering, Supervisors, Project Managers, Environmental Health & Safety, and Protective Services have oversight responsibility for any and all hot work performed on the Washington University School of Medicine Campus. Facilities, Supervisors, Project Managers, Environmental Health and Safety, and Protective Services staff may enter a work-site at any time to assess adequacy of controls imposed on such work, and may amend any permits issued as deemed necessary to protect life and property.

Protective Services should be notified by a contractor by faxing the Hot Work Permit to their office and also by a phone notification prior to any Hot Work taking place. After this happens Protective Services should then fax a copy to the Facilities Engineering Computer Room (2-3135) to notify our department of all Hot Work. When the Hot Work is completed for the day, the contractor should notify Protective Services to perform a Fire Watch.

Workers/Contractors/Subcontractors on Design & Construction projects are required to obtain an annual hot work permit from the City of St. Louis as applicable. The hot work permit is good for one year and is required to be photo copied and posted at each job site as necessary.

- The cost of the annual hot work permit is $20.00 for individual site or $30.00 for City wide.

- The hot work permit can be picked up at the following address:
  Department of Public Safety
  1421 N. Jefferson (located at the corner of Jefferson & Cass)
  St. Louis, MO 63106
  (314) 533-3406

Appendix A

# HOT WORK PERMIT

BEFORE INITIATING HOT WORK, CAN THIS JOB BE AVOIDED?
IS THERE A SAFER WAY?

This Hot Work Permit is required for any temporary operation involving open flames or producing heat and/or sparks. This includes, but is not limited to: brazing, cutting, grinding, and soldering, thawing pipe, torch applied roofing, and welding.

**PART I**

**INSTRUCTIONS**

1. Firesafety Supervisor:
   A. Verify precautions listed at right (or do not proceed with the work).
   B. Complete and retain PART I.
   C. Issue PART 2 to person doing job.

HOT WORK BEING DONE BY:

- ☐ EMPLOYEE
- ☐ CONTRACTOR: _____

| | |
|---|---|
| DATE: | JOB NO. |
| LOCATION/BUILDING & FLOOR: | |
| NATURE OF JOB: | |
| NAME OF PERSON DOING HOT WORK: | |
| 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 this work. | |
| SIGNED (FIRESAFETY SUPERVISOR/OPERATIONS SUPERVISOR): | |
| | |

| | | |
|---|---|---|
| PERMIT EXPIRES | DATE | TIME<br>A.M.<br>P.M. |

NOTE EMERGENCY NOTIFICATION ON BACK OF FORM. USE AS APPROPRIATE FOR YOUR FACILITY.

**REQUIRED PRECAUTIONS CHECKLIST**

- ☐ Available sprinklers, hose streams and extinguishers are in service/operable.
- ☐ Hot Work equipment in good repair.

Requirements within 35 ft. (11m.) of work

- ☐ Flammable liquids, dust, lint and oily deposits removed.
- ☐ Explosive atmosphere in area eliminated.
- ☐ Floors swept clean.
- ☐ Combustible floors wet down, covered with damp sand or fire-resistive sheets.
- ☐ Remove other combustibles where possible. Otherwise protect with fire-resistant tarpaulins or metal shields.
- ☐ All wall and floor openings covered.
- ☐ Fire resistant tarpaulins suspended beneath work.

Work on walls or ceilings

- ☐ Construction is noncombustible and without combustible covering or insulation.
- ☐ Combustibles on other side of walls moved away.

Work on enclosed equipment

- ☐ Enclosed equipment cleaned of all combustibles.
- ☐ Containers purged of flammable liquids/vapors.
- ☐ Pressurized vessels, piping and equipment removed from service, isolated and vented.

Fire watch/hot work area monitoring

- ☐ Fire watch will be provided during and for 60 minutes after work, including any coffee or lunch breaks.
- ☐ Fire watch is supplied with suitable extinguishers, and where practical, charged small hose.
- ☐ Fire watch is trained in use of this equipment and in sounding alarm.
- ☐ Fire watch may be required for adjoining areas above, and below.
- ☐ Monitor Hot Work area for 4 hours after job is completed.

Other precautions taken

- ☐

# Appendix B

WASHINGTON UNIVERSITY IN ST. LOUIS

## Cuffing, Welding and Brazing Activity Log

February 2000

| DATE | TIME CONTACTED | CONTACTED BY |
|---|---|---|
| | | |
| **LOCATION OF WORK** | **TIME WORK STARTED** | **TIME WORK ENDED** |
| | | |

| DISPATCHER NOTIFICATIONS | | |
|---|---|---|
| **NOTIFICATION** | **TIME** | **NOTIFIED BY** |
| Dispatch Supervisor | | |
| Design & Construction or Building Services | | |

| AREA PATROLS | | | | | |
|---|---|---|---|---|---|
| **TIME** | **OFFICER** | **TIME** | **OFFICER** | **TIME** | **OFFICER** |
| 00:00 | | 08:00 | | 16:00 | |
| 01:00 | | 09:00 | | 17:00 | |
| 02:00 | | 10:00 | | 18:00 | |
| 03:00 | | 11:00 | | 19:00 | |
| 04:00 | | 12:00 | | 20:00 | |
| 05:00 | | 13:00 | | 21:00 | |
| 06:00 | | 14:00 | | 22:00 | |
| 07:00 | | 15:00 | | 23:00 | |

Safety Coordinator Review:

Signature Date