SOUTHWESTERN
LAW SCHOOL
Los Angeles, CA

Hot Work Policy

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Revision history: **Technical edits October 2023.**

Related policies: **Fire Protection Systems Impairment Policy**

Scheduled Review Date: **August 2025 (Administrative Services Office)**

A. Understanding the Risk

Inadequately controlled hot work can result in a serious fire. The risks associated with hot work arise from the potential of a fire to start and develop in combustible materials that may be some distance from where the hot work occurs.

Hot work can be described as any operation that emits concentrated heat sources such as sparks or molten metal. Examples include welding, brazing, cutting, grinding, paint stripping, and torch-applied roofing.

Fires starting in roof areas or other restricted spaces are difficult to bring under control and can result in significant property damage. This information is noteworthy as hot work is often conducted in such areas.

B. Controlling the Hazard

Where possible, temporary hot work should be avoided and not be performed within the premises.

If hot work is common, Southwestern's building engineer should designate a hot work area. The hot work area must be of non-combustible construction, well segregated, clear of combustibles, suitably designed for hot work, and inspected regularly.

For hot work that cannot be carried out in a designated workshop, additional procedures

will be required and controlled by an effective hot work permit. A hot work procedure imposes a formal system requiring specific actions to remove unsafe conditions and minimize human-element mistakes.

Vital to the success of a hot work procedure is the appointment of a responsible person or persons such as the fire safety supervisor. This person must be suitably trained and qualified to assess, agree, and monitor hot work operations and to issue hot work permits. Within Southwestern, these responsibilities have been delegated to the building engineer.

Appointed persons need to be aware of other work taking place on site that may impact or be impacted by any planned task. They must have the authority to refuse requests to carry out hot work and to stop hot work operations if required.

Before agreeing to the hot work, the appointed person must determine if hot work is the only option. Hot work should not be carried out if alternative, safer means of completing the job are available.

C. Hot Work Procedure

If it is deemed that in-situ hot work is essential, a hot work procedure needs to be followed in conjunction with other interested parties, such as the tenant.

D. Risk Assessment

The department head of Southwestern's Administrative Services Office will complete initial assessments of the work to be completed. The nature of hot works means that a fire can be started outside the immediate area where work is being performed. The assessment must consider the environment in which the work is to be conducted and establish that it is safe to continue.

Hot work is often associated with work on metal vessels and containers that may have contained flammable materials or have been under pressure. Vessels that have contained flammable materials must be purged before commencing hot work. Hot work must not be allowed in explosive, pressurized, or flammable atmospheres.

Where construction materials are unknown, the worst case must be assumed. Hot work should not occur on insulated panels or where the cores of such panels are exposed.

E. Contractors

If a contractor is to perform the hot work, they must understand and abide by site systems, procedures, and rules. Before work commences, the department head of Southwestern's Administrative Services Office must check their insurance certificates and the test certificates relating to their equipment.

F. Fire-Detection and Suppression

1. Systems

Fire detection systems may need to be isolated to prevent false activations. Only individual detectors in the vicinity of the work should be isolated. Any activation outside this area suggests smoke has spread beyond the areas anticipated by the risk assessment and potential fire spread.

Sprinkler systems should remain active throughout hot work whenever possible.

All isolated fire detection and suppression systems must be fully reinstated at the end of each day.

2. Fire Watch

For most operations, a fire watch (one-hour duration) will be needed to react to any fires that may start outside the operator's field of view in situations when there are nearby walls or other visual obstructions, or if elevated work is being carried out.

The person appointed to conduct the fire watch must be suitably trained in what to look out for and what actions to take if a dangerous situation occurs. These actions include sounding the alarm and tackling a fire if deemed safe to do so.
The fire-watch period must be continuous, including during rest breaks. Fully charged fire extinguishers suitable for the environment must be provided.

3. Work Area

Sparks and other hot emissions can commonly spread a horizontal distance of 10 meters from the work area, which will increase if work is carried out in an elevated position or if there are strong air currents.

Precautions include removing all storage within a minimum radius of 10 meters around the area of hot work. This area must be swept clean of combustibles, dust, lint, swarf, chippings, etc., including around beams or other spaces where accumulations may occur and where heat may reach.

The potential heat transfer by conduction— for example, long pipework passing into potentially combustible construction or storage areas—must be considered.

Combustible floors must be wetted or covered in damp sand or other fireproof material.

All flammable liquids and compressed gases must be removed from the work area; however, if it is not possible to remove normally combustible materials, they must be covered with a fireproof blanket sufficient to prevent the ingress of hot

materials.

To prevent the spread of fire, all holes in walls, gaps in the floor, voids, vents, and conveyors must be protected with non-combustible materials.

4. Hot Work Permit

A hot work permit acts as a formal checklist and provides documentation of the controls that have been implemented.

There are many examples of permits available that may be used as long as the key aspects recovered. Southwestern's hot work permit can be obtained from the Administrative Services Office.

The form and checklist must be completed and signed by the appointed person and the person completing the work before the work is allowed to commence.

Once all parties are satisfied and the form has been signed, a copy should be held on file with the original taken to the work area and prominently displayed.

5. Hot Work Operation

Once work has commenced, should there be a need to use a fire extinguisher, work must be stopped until the full cause of the fire has been understood, appropriate action has been taken to prevent a reoccurrence, and fire extinguishers used have been replaced.

If the maximum permit period of a single shift needs to be exceeded, the appointed person must be informed and issue a new permit with all sections completed and signed by all parties.

If any doubt exists about the work being carried out, the hot work must stop, the appointed person notified, and the fire watch retained.

6. Completion of Hot Work

Once the hot work has been completed, the area must be cleared of work equipment and waste materials, with all isolated fire detection and suppression systems reinstated.

The fire watch needs to be retained for 60 minutes. After that period, the area should be monitored for an additional 60 minutes. If no signs of fire have appeared after this time, the fire watch must sign the final check. The permit will now be closed, returned to the appointed person, and held on file for reference.

The department head of Southwestern's Administrative Services Office must conduct regular audits of the retained permits to ensure permits are fully

completed and signed off as required.