Hot Work – Safety Talk

THE UNIVERSITY OF CHICAGO

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On October 26, 2010, a fire broke out in the Math-Stat Building on 5727 University Avenue. The building was under renovation at the time of the fire. Welding embers were determined to be the cause of the fire.

Fortunately, nobody was injured. However the fire resulted in extensive damages to the building and major delays in the project.

"Hot Work" is any operation that utilizes open flames or produces heat or sparks.

The heat or sparks produced from hot work can ignite combustible materials and result in a fire.

The following operations are considered hot work:

- Brazing;
- Open-flame soldering;
- Oxygen cutting;
- Grinding;
- Torch-applied heating/roofing; and
- Welding.

When possible, avoid hot work by using less hazardous techniques.

Hot Work Permits are issued by Environmental Health and Safety and must be obtained prior to doing any of the activities above.

Please provide at least 24 hours notice for a hot work permit request.

Hot work permits are required for both employees and contractors.

General precautions to follow when performing hot work include:

- Removing combustible and flammable items with 35 feet of work;
- Protecting non-removable combustible items with fire-resistive blankets or other barriers;
- Covering openings in the wall or floor and protecting ventilation system ducts;
- Having properly-working fire extinguishers immediately available;
- Working in an area with fire sprinkler coverage;
- Ensuring contractors are aware of how to sound an alarm in case of a fire; and
- Fire watch for at least 30 minutes after completing work.

The 30-minute fire watch ensures that left-over embers do not ignite into a fire.

A fire watch may have prevented the fire in the Math-Stat building.

Other Precautions to Follow When doing Hot Work:

1. **Use proper PPE, which may include: gloves, apron or jacket, respirator, and/or welders helmet.**
2. **Ensure all equipment is in good working condition prior to using.**
3. **Propane may not be used for hot work inside occupied University buildings.**
4. **Perform welding in well-ventilated areas or use a fume extractor.**
5. **Surround the work area with barriers or welding curtains to protect the general public.**
6. **Only when and where necessary, deactivate smoke or heat detectors to prevent inadvertently tripping the fire alarm (see below).**

HOT WORK POLICY:

Please review the "Welding Brazing Soldering" policy on the Environmental Health and Safety website for further information.

Follow the "Fire Detection Impairment Procedure" under the "Fire Detection Systems" policy for deactivating heat or smoke detectors.