Hot Work Permit Procedures

Hot work includes: welding, cutting, open torch, brazing, grinding, soldering and other work generating flames or sparks. Hot work does not include: Bunsen burners in laboratories, cooking operations, fixed grinding wheels, or electric solder irons. If you are not sure if an operation is considered hot work, contact EHS (Environmental Health & Safety Department) at 629-7163.

To the extent possible, all hot work will be conducted in a permanent Designated Hot Work Area having the following features:

- constructed of noncombustible materials, with all openings or cracks in walls or floors tightly covered to prevent the passage of sparks
- floors kept clean; noncombustible surface
- no storage of flammable, combustible or other chemical materials in the area (note: oxygen and fuel gas cylinders used for welding operations must not be stored or used with 35 feet of the Designated Hot Work Area)
- adequate ventilation to remove smoke, fumes and odors
- flammable gases, vapors or liquids are not present
- if a sprinkler system is present, it must be fully operational
- the area will be clearly delineated from other work areas with a sign: CAUTION HOT WORK AREA

Designated Hot Work Areas will be inspected by EHS on a regular basis to ensure all of these features remain in place.

If hot work is necessary in other areas on a temporary basis, a hot work permit will be obtained before proceeding. The purpose of the permit is to ensure the area is rendered fire safe before work proceeds. Permits are issued by the Environmental Health & Safety (EHS) Department or the Physical Plant Department. Contractors having a hot work permit program that is at least equivalent to the HVCC program may use their program and issue their own permits. The Director of EHS or Physical Plant department staff reserve the right to inspect any work area where hot work is occurring to ensure fire safety considerations have been adequately addressed.

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 Hot Work Area.

2. If hot work must be performed in a temporary location, a Hot Work Permit must be obtained before the work begins. The procedure is as follows:
   a. The worker will contact EHS or Physical Plant to obtain a hot work permit. Workers must inspect the work area for fire protection features and report this information to the EHS/Physical Plant person issuing the permit.
   b. A Fire Watch must be designated for all hot work permits issued, unless there are **absolutely** no fire hazards and no combustible exposures. This must be verified by the EHS/Physical Plant person signing the permit. This exception is expected to be used rarely, and in most cases a Fire Watch must be designated.
      - The person designated as the Fire Watch must remain in the area during hot work and for 30 minutes following the completion of hot work. Their assigned job is to monitor the hot work area and the surrounding area for fire, fire damage or potential for fire. The Fire Watch can be given other duties during this time, as long as it does not interfere with their responsibilities outlined here.
   c. The hot work permit will not be issued unless all items on the Hot Work Checklist portion of the permit have been adequately addressed.
   d. If fire detection in the area must be disabled, the worker must contact Physical Plant (629-7356) or Public Safety (629-7210)
   e. Permits for multiple day hot work jobs are permissible and will be noted on the permit. However, the fire detection must be re-activated each night at the completion of that day’s hot work operation, even for multi-day permits.
      - For multiple day jobs the workers will review the Hot Work Checklist and inspect the hot work area at least once per day. A new permit is not necessary for the same job, unless there are significant changes in conditions.
   f. The worker will keep the permit posted in the area where hot work is being performed until the permit is closed.

3. Emergency Procedures: Should a fire occur, the Fire Watch, worker or other staff in the area may use a fire extinguisher if, in their judgment, it is safe to do so and they know how to use the extinguisher. Anyone serving as a Fire Watch
must know how to use a fire extinguisher. However, at no point should any one place their life or safety in jeopardy for a fire.

Factors to consider in using a fire extinguisher:

a. First, have you initiated the fire alarm so that back up help is on its way and others can begin to evacuate?

b. Secondly, is there a safe exit behind you, so that if necessary, you can safely get away from the fire?

c. Third, is the fire beyond the incipient stage? This means a fire large enough that it cannot be extinguished using one fire extinguisher. If this is the case DO NOT attempt to use a second fire extinguisher; evacuate immediately and ensure that the building alarm has notified all others to evacuate.

d. For more information on how to use a fire extinguisher go to: http://www.youtube.com/watch?v=BLjoWjCrDqg

e. Note: anytime a fire extinguisher is used, this must be reported to the Environmental Health & Safety Department (629-7163) so that the extinguisher can be recharged and the incident documented.

4. Close out procedures: At the completion of hot work, the Fire Watch and worker will remain in the area for at least 30 minutes. At the end of this time period, the worker and Fire Watch will thoroughly inspect the work area and the surrounding area for fire, smoldering or other signs of potential fire before leaving the area.

If smoke or heat detection had been de-activated, the worker will notify Public Safety or Physical Plant to re-activate the system.

The worker or Fire Watch will fill out the Permit Close Out section of the permit, sign and submit to the EHS/Physical Plant person who issued the permit.

5. All HVCC permits will be submitted to the EHS Department and kept on file for three years.