



Department of Public Safety

Environmental Health & Safety
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STANDARD OPERATING PROCEDURE

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SUBJECT: Hot Work Permit Program

I. PURPOSE

The purpose for the hot work permit program is to ensure that spark and flame producing construction and maintenance activities do not present an undue fire/explosion hazard to the people and property of The Ohio State University Wooster Campus.

Hot work includes any operation producing flame, sparks or heat. Examples of hot work include, but are not limited to torch cutting, welding, brazing, grinding, sawing, torch soldering, thawing frozen pipes and applying roofing materials.

Hot work in this permit program does not include activities that normally occur in regular activities such as cooking, heating, electric iron soldering, autoclaving, cauterizing, etc.

This Hot Work Permit program applies to hot work in existing buildings and to hot work in new construction attached to existing buildings. This Hot Work Permit program does not apply to construction of new buildings that are not attached to existing buildings and does not apply to areas specifically designed and equipped for hot work, i.e. welding rooms in maintenance shops, etc.

II. PROCEDURES

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 should be moved to a designated safe location (i.e. maintenance shops).

Before hot work can occur, the following requirements must be completed:

- A. A hot work permit must first be completed by the individual who will supervise the hot work and approved by the EHS officer and/or a *qualified representative, before any hot work begins. All precautions on the hot work permit checklist must be met prior to any work commencing. The hot work permit is only good for the dates and activities specified on the permit. The hot work permit must be on display at the work site during all hot work activities.
- B. The second requirement before hot work can occur is to address safety within 35 feet (11 meters) horizontally from the work site as follows:
 1. All combustible materials are relocated out of the 35 feet area. Where relocation of combustible materials is impractical, combustibles shall be protected with flame-proof

- covers or otherwise shielded with fire-resistant guards or curtains. Edges of covers at the floor shall be tight to prevent sparks from going under them.
2. Openings or cracks in walls, floors, or ducts within 35 feet (11 meters) of the work site are tightly covered to prevent the passage of sparks and smoke to adjacent areas and adjacent floors.
 3. Stored compressed gas cylinders are relocated out of the 35 feet area.
 4. Floors in the area must be swept clean of dust and combustibles.
 5. Combustible floors are wetted down or covered with damp sand, metal or other fire retardant shields.
 6. Tanks, ducts, containers, etc. being worked on are purged of combustibles and vapors.
 7. Hot work equipment must be inspected and in proper working condition as designed by the manufacturer.
- C. The third requirement before hot work can occur is to address the safety systems and the safety of occupants within the building. The hot work supervisor must notify the OSU Environmental Health and Safety at 330-263-3663 when starting and ending all hot work. Sprinkler systems (tied into Columbus, ex. ATI) and smoke & fire detectors in the area may need to be disabled or covered at the direction of the OSU FOD Fire Safety Systems Dept at 614-292-3004. HVAC systems may also need to be temporarily disabled or altered at the direction of the FS (OARDC x3915, ATI x1362).
- D. The fourth requirement before hot work can occur is to establish a fire watch.

III. FIRE WATCH

A fire watcher shall be required wherever hot work is being performed. The fire watcher(s) will be assigned by the supervising individual to be present and watching for fires and other safety hazards at all times during the hot work and for at least 30 minutes after the hot work ends. Fire watchers shall have fire extinguishing equipment readily available and be trained in its use, including practice on test fires. Fire watchers shall be familiar with facilities and procedures for sounding an alarm in the event of a fire. Fire watchers must stop hot work immediately should unsafe conditions develop or should additional fire watchers be needed and must immediately notify the individual supervising the project or the EHS officer who authorized the hot work permit at 330-263-3663.

IV. HOT WORK PERMIT AUTHORIZATION

The hot work permit must be reviewed and approved by a representative of The Ohio State University's Wooster Campus EHS officer. The EHS officer and/or qualified representative authorizing the hot work will review the following conditions with the individual supervising the hot work to:

1. Assure that the above safety conditions have been met;
2. Assure that the person doing the hot work has been trained in the use of the hot work equipment;
3. Assure that the person doing the hot work and the fire watcher understand the OSU hot work safety conditions identified above;
4. Assure that the person doing the hot work and the fire watcher understand emergency procedures in case of fire;

5. Assure that the supervisor will inspect the hot work area during and 30 minutes after the hot work and provide required notification to:
 - a. OSU's EHS,
 - b. FS, (OARDC, ATI)
 - c. OSU FOD's Fire Safety Systems (tied into Columbus, ATI) (section VI),
6. Reference NFPA 51B, Standard for Fire Prevention During Welding, Cutting, and Other Hot Work for any questions.

V. FINAL CHECK

The person supervising the hot work and the assigned fire watcher will inspect the entire hot work area, including floors above and below the hot work area and on opposite sides of walls in hot work area, 30 minutes after the hot work is completed each day. The supervisor will sign the hot work permit on display in the area each day certifying that the area is found fire safe. This signed final copy of the hot work permit will be delivered to the Wooster Campus EHS officer who authorized the hot work permit as soon as the hot work project is complete.

VI. RESPONSIBILITIES AND SUPERVISION

The procedures and requirements in this Hot Work Permit program are based on standard no. 51B of the National Fire Protection Association and standard no.1910.252 of the OSHA Act of 1970.

The procedures and requirements within this Hot Work Permit program will be adhered to by all departments and entities within The Ohio State University Wooster Campus. Departments and entities within The Ohio State University Wooster Campus using contractors or employees to perform hot work will assure that individuals performing the hot work are suitably trained in the safe operation of their equipment and the safe use of the process.

Facilities Operations and department employees and management will insure that this policy is implemented throughout The Ohio State University Wooster Campus under areas of their jurisdiction and for providing education to all OSU Wooster Campus departments, entities and staff for compliance with this program and pertinent OSHA requirements.

Supervisors who apply for hot work permits will be responsible for the safe condition of the hot work equipment, for the safe handling of the hot work equipment and for the safe use of the hot work process. Supervisors who apply for hot work permits will contact OSU Wooster Campus EHS (330-263-3663) and OSU Building Automation Alarm Systems (system tied into Columbus) (614-292-5558) in advance of the start of the hot work for possible inactivation and reactivation of sprinkler and fire/smoke detector systems.

*Qualified Representative From Within the Respective Department.

References:

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9853&p_table=STANDARDS
NFPA 51B Standard (located at Old Administration Building, Planning Office)

<http://www.fmglobal.com/assets/pdf/fmapprovals/4950ansi.pdf>