



Millersville University

Hot Work Procedure

Department of Environmental Health and Safety

EHS Standard Operating Procedure- 1.2

12/21/22

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1.0 PURPOSE:

Millersville University (MU) is committed to preventing loss of life and property, and maintaining a safe environment for students, faculty, staff, and visitors. This procedure is designed to eliminate or control potential ignition sources resulting from welding, flame cutting, soldering or similar activities which may produce flames or sparks. Provide a safe work/learning environment in University buildings where temporary hot work may be performed. Potential health, safety and property hazards can result from the fumes, gases, sparks, hot metal and radiant energy produced during hot work. These, and other hazards, can be reduced through the implementation of effective controls as outlined in this Policy.

2.0 SCOPE:

This policy applies to all Millersville University employees and contractors involved in welding, cutting or braising of metals, in areas other than those designated specifically for that purpose.

3.0 RESPONSIBILITY:

The project manager, Director of Maintenance & Operations, and/or Assistant Vice President for Facilities shall maintain awareness of processes requiring hot work and implementation of this procedure. The Director of Environmental Health and Safety will review all Hot Work Permits and ensure operations are conducted in accordance with the permit requirements and this procedure.

It is the responsibility of each University employee and contractor engaged in hot work to implement controls that will eliminate or greatly reduce the hazards generated by their work, for the protection of other University employees, students and visitors.

Each supervisor, whose employee(s) engage in hot work, shall ensure that the guidelines in this Policy are implemented and hazards are controlled so as not to present an exposure to University employees, students and visitors. It is also the responsibility of the supervisor to ensure the employee(s) they designate to perform hot work utilize the necessary procedures and equipment, so as to minimize that employee's own exposure to the hazards generated.

4.0 DEFINITIONS

Combustible: able to catch fire and burn easily

Fire Watch: a temporary measure intended to ensure continuous and systematic surveillance of a building, or portion of the building, by one or more qualified individuals for the purpose of identifying and controlling fire hazards, detecting early signs of fire, activating an alarm, and notifying the fire department in the event of a fire.

Hot Work: any activity or process that generates a source of ignition, this could be through a flame, heat or a spark. Sometimes, hot work can be direct, e.g., the equipment or tool creates a flame or produces heat. Other times it may be indirect, e.g., using an abrasive wheel to cut metal produces sparks.

Hot Work Permit: the document, other than a Contract or a License, issued by the Agency under which an Operator acquires the right to conduct operations involving electric or gas welding, cutting, tapping, [brazing](#), or similar flame or spark producing operations

Noncombustible: incapable of igniting and burning when subjected to fire.

5.0 PROCEDURES

No employee of the University, contractor hired by the University, or subcontractor hired by the contractor shall perform any hot work, as defined above, unless a hot work permit is obtained.

This policy does not apply to activities such as cooking, electric soldering irons, or laboratory equipment (e.g. Bunsen burners or other lab equipment). This procedure does not apply to outdoor activities when they are located more than 35 feet from buildings of combustible construction or surroundings.

5.1 UNIVERSITY EMPLOYEE

The employee conducting the work shall submit a Fire Protection System Shutdown Request Form (**Attachment A**) at least 48 hours prior to the hot work being completed. The EHS Director will forward the Form to the Electric Department for evaluation of the devices or systems that will need to be disabled the day of the hot work being initiated.

The morning that work will be completed, the employee will obtain a signed Hot Work Permit (**Attachment B**) from the EHS Director and will post it at the job site. Each permit is job specific.

The tag must be returned to the EHS Director once the work is completed. Hot Work Permits will be issued for a 24-hour period. Work requiring longer work periods will require additional permits to be issued for each subsequent 24-hour period. EHS will keep the permit on file for a period of not less than one year.

5.2 OUTSIDE CONTRACTOR

Prior to starting a project that requires hot work, the supervisor of the employee performing the hot work, or the project manager of the contractor/subcontractor shall obtain a hot work permit (**Attachment B**) from EHS. The project manager shall submit a Fire Protection System Shutdown Request Form (**Attachment A**) at least 48 hours prior to the hot work being completed and will follow the procedures outlined in Section 5.1

5.3 FIRE WATCH

A fire watch must be maintained when hot work is performed in a location where the following condition(s) exist:

- I. Combustible materials in building construction or building contents are closer than 35 feet to the point of operation of the hot work
- II. Combustible materials are more than 35 feet away, but are easily ignited by sparks
- III. Wall or floor openings within a 35 feet radius expose combustible materials in adjacent areas, including concealed spaces in walls or floors
- IV. Combustible materials are adjacent to the opposite side of partitions, walls, ceiling, or roofs and are likely to be ignited
- V. Deactivation of any automatic fire detection devices present within 35 feet of the hot work.

The fire watch shall:

- I. Be aware of the inherent hazards of the work site
- II. Ensure safe conditions are maintained during the hot work operation
- III. Have the authority to stop the hot work operations if unsafe conditions develop
- IV. Have fire extinguishing equipment immediately available
- V. Activate emergency response in the event of a fire

If any automatic fire detection devices are deactivated, the Fire Safety System Impairment/Fire Watch Procedures should be followed in addition to the above activities. The fire watch shall be maintained during all breaks and one hour after completion of the hot work operation to detect and extinguish smoldering fires at the hot work site, on the floors above, below and adjacent to the hot work site if applicable. Fire watch responsibilities should rotate between personnel at 2-hour intervals.

5.4 CONFINED SPACES

Any hot work done in confined spaces, whether designated as Permit Required or non-permit required, will follow Permit Entry Required for confined spaces. The very nature of hot work in a confined space makes the atmospheric hazards of that space a danger to employee health. Consult Environmental Health and Safety before conducting hot work in any confined space (labeled or otherwise).

6.0 TRAINING

It is expected that any University employee engaged in hot work has received training and developed the skills necessary to work in a safe and professional manner.

Environmental Health and Safety will train and consult with any employee, at the request of their supervisor, on the topic of personal and fire safety as it relates to hot work.

All supervisors with a need to issue hot work permits will be trained in their completion, and the guidelines of this Policy, with the assistance of Environmental Health and Safety.

**** ATTENTION PROJECT MANAGER:** Submit completed form to MU Electrical Department,
Attn: Glenn Swan, Request is not considered complete until Electrical Department approval ******

**READ INSTRUCTIONS BELOW
CAREFULLY**

1. Any field left blank or incomplete will result in denial of request.
2. Shutdown request must be submitted by Project Manager or Director/Asst. Director of the Facility.
3. **Work cannot begin if there is a chance of fire alarm activation, without approval via signed form.**
4. Approved form must be posted with Building Permit, Hot Work Permit, etc.
5. Work requiring shutdown or turn on during holiday or weekend requires 5 days advance notice.
6. **If dust is created, smoke and heat heads must be covered, even when devices are disabled:**
 - a. Powder-free latex glove or shower cap
 - b. Painters tape
 - c. NO duct tape!
7. Damage to fire alarm devices will be the responsibility of the person/company performing the work.
8. Normal hours for shutdown or turn on is 07:00-15:00. Hours needed outside of that time must be approved through MU Facilities Project Manager.
9. Persons/entities/organizations deemed by MU to be causing nuisance/false alarm activations due to failure to follow impairment guidelines may be subject to STOP WORK ORDER, or removal from site.

FOR OFFICE USE ONLY:

Approved by: _____ Date: _____ Work Request# _____

Special instructions: _____

Denied by: _____ Date: _____

Reasons for denial: _____

ATTACHMENT B: HOT WORK PERMIT

HOT WORK PERMIT

**DO NOT REMOVE
THIS TAG!**

**TO DO SO WITHOUT AUTHORITY
WILL MEAN DISCIPLINARY ACTION!**

Remarks:



SEE OTHER SIDE

**Millersville University
HOT WORK PERMIT**

**CAN THIS JOB BE DONE WITHOUT HOT WORK, OR IN THE SHOP?
IF NOT, ENSURE PRECAUTIONS ARE IN PLACE!**

MAKE SURE SPRINKLERS ARE IN SERVICE AND FIRE EXTINGUISHERS ARE READILY AVAILABLE!

This Hot Work Permit is required for any operation involving open flames or producing heat and/or sparks. This includes, but is not limited to, Brazing, Cutting, Grinding, Soldering, Thawing Pipe, Torch-Applied Roofing, and Welding.

Hot Work Being Done By: _____

- Employee
- Contractor

Date/Job/Work Order No. _____

Location/ Building and Floor _____

Nature of Object _____

Name of Person(s) 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 work.

Signature of Permit-Authorizing Individual:

	Yes	No	N/A
1. Read the Hot Work Procedure?			
2. 35' Radius: work area and equipment has been made free of flammable, combustible, and hazardous materials			
3. Combustibles removed or shielded from sparks?			
4. Sprinklers in Operations?			
5. Is a Fire Extinguisher on the Job?			
6. Are smoke detectors covered?			
7. Lines disconnected or blanked?			
8. Is Fire Watch provided?			
9. Adjoining equipment and operations safe from effects of the job?			
10. Fire Watch in place for at least 1 hour after?			
11. Other necessary precautions?			

THIS PERMIT IS GOOD FOR 24 HOURS!