

Business Affairs Environmental Health and Safety

### **UW–Stevens Point Hot Work Permit**

Hot work is any operation that generates heat, sparks, or an open flame. This includes, but is not limited to welding, cutting, grinding, soldering, torch-applied roofing, heat treating, thawing pipe, powder-driven fasteners, hot riveting, and similar activities.

Responsibilities of Management for Hot Work:

- Management or a designated agent shall be responsible for the safe operations of hot work activity.
- Management shall establish permissible areas for hot work.
- Management shall designate a permit authorizing individual (PAI).
- All equipment shall be examined to ensure it is in a safe operating condition.
- Local exhaust or general ventilating systems shall be provided and arranged to keep the amount of toxic fumes, gases, or dust below the maximum allowable concentration.
- Individuals involved in hot work operations shall be trained in;
  - The use of welding and cutting equipment, material hazards, and control methods.
  - Personal protective equipment
  - The written hot work program and /or permit system.
  - The use of fire extinguishers.
- Appropriate personal protective equipment is provided. (Welding helmet or goggles, respirators, flame resistant clothing, safety shoes, and insulated hot work gloves.)
- A fire watch shall be required whenever welding or cutting is performed in locations where other than a minor fire might develop.
- Contractors must employ suitably trained personnel who have an awareness of the magnitude of the risks involved and must use only approved apparatus, such as torches, manifolds, regulators, or pressure reducing valves, and acetylene generators.
- Management shall advise all contractors about site-specific flammable materials, hazardous processes or conditions, or other potential fire hazards.
- This work must comply with 29CFR 1910.252 and NFPA 51B.

Responsibilities of PAI:

- The PAI shall consider the safety of the hot work operator and fire watch with respect to personal protective equipment (PPE) for other special hazards beyond hot work.
- The PAI shall determine site-specific flammable materials, hazardous processes, or other potential fire hazards that are present or likely to be present in the work location.
- The PAI shall ensure the protection of combustibles from ignition by the following means:
  - Considering alternative methods to hot work
  - Moving the work to a location that is free from combustible
  - If the work cannot be moved, moving the combustibles to a safe distance or having the combustibles properly shielded against ignition
  - Scheduling hot work so that operations that could expose combustibles to ignition are not begun during hot work operations
- The PAI shall determine that fire protection and extinguishing equipment are properly located at the site.
- The PAI shall ensure;

University of Wisconsin - Stevens Point EHS Manual UW-Stevens Point Hot Work Permit



Business Affairs Environmental Health and Safety Stevens Point WI 54481-3897 715-346-2320; Fax: 715-346-3780

- Regulators are compatible with gas cylinders.
- Cylinder carts are used for cylinder transport.
- Cylinders are secured from tipping while in use.
- Empty or unused gas cylinders are returned to the supplier.
- The PAI shall be responsible for ensuring that a fire watch is at the site where a fire watch is required and the PAI shall make a final check 1/2 hour after the completion of hot work operations to detect and extinguish smoldering fires where a fire watch is not required.

#### Responsibilities of Fire Watch:

A fire watch required where:

- Combustible materials in building construction or contents are closer than 35 ft (11 m) to the point of operation.
- Combustible materials are more than 35 ft (11 m) away from the point of operation but are easily ignited by sparks.
- Wall or floor openings within a 35 ft (11 m) radius expose combustible materials in adjacent areas, including concealed spaces in walls or floors.
- Combustible materials are adjacent to the opposite side of partitions, walls, ceilings, or roofs and are likely to be ignited.

The fire watch must:

- Be trained to understand the inherent hazards of the worksite and of the hot work.
- Ensure that safe conditions are maintained during hot work operations.
- Have fire-extinguishing equipment readily available and be trained in its use.
- Be familiar with the procedures for sounding an alarm in the event of a fire.
- Watch for fires in the exposed areas and extinguishes spot fires and communicates alarms immediately.
- Have the authority to stop the hot work operations if unsafe conditions develop.

The fire watch may be assigned other work duties while in the hot work area; however, s/he must be vigilant in watching for fires during and <u>30 minutes following</u> hot work.

#### Before initiating Hot Work, determine if there is a safer way to complete the work.

Date: \_\_\_\_\_Location: \_\_\_\_\_

Work Order #\_\_\_\_\_ Type of Hot Work: 
Soldering 
Welding 
Cutting 
Roofing 
Other

<u>Hot Work Precautions Check List</u>: Complete prior to any hot work beginning in an area not designated for hot work. Check each box where the statement is true. If any statements are not true, then hot work should not begin until that issue has been safely resolved.

#### **Required Safety Precautions**

□ Fire suppression sprinklers or fire extinguishers are available and operable.

- □ Hot work equipment is operable and in good repair.
- □ If smoke/fire detectors in the immediate area of the hot work need to be temporarily disabled until the hot work is complete, notify Facility Services at 4219, Protective Services at 3456, and affected departments.



Business Affairs Environmental Health and Safety Stevens Point WI 54481-3897 715-346-2320; Fax: 715-346-3780

- □ Building occupants have been protected or isolated from the hot work area.
- □ Drums, barrels and tanks have been cleaned and purged of flammables and toxics, all tank feeds are closed, and the tank is vented.
- □ Test work area's atmosphere prior to beginning work for flammable vapors or gases (LEL) wherever flammable vapors or gases may be anticipated.

#### **Requirements within 35 feet:**

□ Area within 35 feet of the work area has been properly swept to remove any combustible debris.

- □ Flammable and ignitable materials and debris have been moved at least 35 feet from the hot work area or covered and protected with fire-resistant materials (such as approved welding curtain, welding blanket, welding pad, or equivalent).
- □ Cracks or holes in floors, walls, and ceilings (including ductwork) within 35 ft (11 m) of the site are covered or sealed with approved fire-rated or noncombustible material to prevent the passage of sparks to adjacent areas.
- □ Combustible floors covered with fire-resistive material.

□ Any system that might carry sparks to distant combustibles has been shielded and/or shutdown.

#### **Requirements within 50 feet:**

□ Explosives, compressed gas cylinders, or stored fuel have been moved at least 50 feet from the hot work area or have been protected from the hot work.

#### Work on walls or Ceilings

- □ Construction is noncombustible and has no combustible covering or insulation.
- □ Areas adjacent to walls being worked on are checked for combustibles and any combustibles are either removed or protected by an approved welding curtain, welding blanket, welding pad, or equivalent.

#### When work is completed:

□ Inspected work area and any potentially affected surrounding areas for fire, fire damage, or potential for fire.

□ Reactivated smoke/fire detectors that were disabled because of the hot work.

# Fire Watch required during Hot Work and a minimum of 30 minutes following completion of work. Yes \_\_\_\_ No \_\_\_\_ Name: \_\_\_\_\_

I verify that the above location has been examined and the necessary precautions have been taken to prevent the outbreak of fire due to Hot Work.

Supervisor Signature:	Date:
Employee Signature (Issued): Time	Date:
Employee Signature (Closed): Time	Date:



Business Affairs Environmental Health and Safety Stevens Point WI 54481-3897 715-346-2320; Fax: 715-346-3780

This Permit is valid only for the day issued

The information below must be posted in the Hot Work Area!

# WARNING! HOT WORK IN PROGRESS WATCH FOR FIRE!

**Emergency Numbers:** 

## In case of FIRE call 911 UW-Stevens Point Protective Services 346-3456 Facility Services 346-4219

Supervisors shall return completed permit to: Facility Services, Maintenance and Materiel Bldg UW-Stevens Point – Stevens Point, WI 54481