Hot Work Program Policy

Purpose

This program has been developed to prevent fires resulting from temporary operations that produce heat, sparks, hot slag, or have open flames. This includes, but is not limited to brazing, cutting, grinding, soldering, thawing pipes, torch applied roofing and welding. In addition, this program ensures compliance with rule 408.40761 of Part 7 in the MIOSHA Construction Standards and Rule 408.11261 of Part 12 in the MIOSHA General Industry Standards.

Scope

This program applies to Western Michigan University employees and contractors who perform or supervise hot work activities in existing buildings, new construction in existing buildings, and new construction attached to existing buildings.

This program does not apply to areas that are specifically designed and equipped for such operations, i.e., designated welding areas.

Definitions

Hot work is any work that produces a possible source of ignition, including but not limited to welding, torch cutting, brazing, soldering, flame heating, thawing pipes, torch applied roofing, and grinding.

The Department Supervisor or delegated Fire Safety Supervisor is responsible for authorizing the hot work job by reviewing and signing the permit to verify that all precautions were followed.

A Contract Administrator or Project Manager is responsible for outside contractors adhering to hot work procedures when working on WMU campus or other properties.

A Designated Area shall be a specific area designed or approved for such work, such as, a maintenance shop or a detached outside location that is of noncombustible or fire-resistive construction, essentially free of combustible and flammable contents, and suitably separated from adjacent areas.

Procedures/Requirements

1. Hot work should not be performed if the work can be avoided or can be performed in a safer manner. When practical, objects to be welded, cut, or heated must be moved to a designated area.
2. If hot work must be performed, a Hot Work Permit must be obtained before the hot work begins.
3. All instructions must be followed and all checklists filled out on the Hot Work Permit prior to performing any hot work.
4. The Department Supervisor shall designate or perform the duties of the Fire Safety Supervisor. The fire safety supervisor will fill out and post a completed Hot Work Permit at the hot work site. The permit is not valid beyond one work shift and is valid only for
the date and time specified on the permit. A copy of the permit must remain at the hot work location until the hot work is completed. Upon completion of the hot work the permit must be forwarded to the Environmental Health and Safety office.

5. A Fire Watch is REQUIRED whenever hot work is done in an area where one or more of the following conditions exists:
   A. Appreciable combustible material is within 35 feet of the point of operation;
   B. Appreciable combustibles more than 35 feet away may be easily ignited by sparks;
   C. Wall or floor openings within 35 feet expose combustibles in adjacent areas including confined spaces.
   D. Combustibles could be ignited by conduction or radiation through metal partitions, walls, ceilings, or roofs.

6. Maintain a Fire Watch at the scene for at least 30 minutes after the hot work has stopped.

7. All personnel (employees, contractors, building occupants) must be suitably protected against hazards generated by the work, e.g., heat, sparks, fumes, welding rays, etc. This may include but is not limited to, the use of personal protective equipment, shields, screens, or local exhaust ventilation.

8. Conveyor systems that might carry sparks to distant combustibles shall be shut down.

9. Exhaust systems that might carry sparks to distant combustibles shall be shielded.

PROHIBITED CONDITIONS: A HOT WORK PERMIT WILL NOT BE ISSUED IF ANY OF THE FOLLOWING CONDITIONS EXIST:

1. In a sprinkled building while such protection is impaired unless a fire watch is provided.
2. Appropriate firefighting equipment such as a hose or fire extinguisher is not readily available.
3. Combustible or flammable materials are within 35 feet and cannot be moved or protected;
4. The presence of an explosive atmosphere such as mixtures of flammable gases, vapors, liquids, or dusts with air.
5. Floor and wall openings cannot be covered including ductwork;
6. Cutting or welding on pipes or other metals can conduct enough heat to ignite nearby combustible materials; or
7. Any condition that could result in undue hazards by performing the work.

Responsibilities

1. Department Responsibilities:
   a. Recognize its responsibility for the safe use of cutting and welding equipment in their area;
   b. Establish designated areas for cutting and welding;
   c. Ensure hot work procedures are being implemented and followed in other than designated areas;
   d. Ensure that supervisors, cutters and welders, are suitably trained in the operation of the equipment and the safe use of the process; and
   e. Ensure that contractors follow University procedures and requirements.

2. Supervisor Responsibilities:
   a. Ensure that all employees and contractors are following hot work procedures;
   b. Ensure that a hot work permit is issued prior to the start of work;
   c. Ensure that all cutting and welding equipment is in good repair;
   d. Ensure that employees are properly trained in the operation of the equipment used in the hot work process.
   e. Ensure that employees are properly trained in the Hot Work Program.

3. Hot Work Operator Responsibilities:
   a. Follow and use hot work procedures;
   b. Obtain a hot work permit prior to starting work;
   c. Ensure that all cutting and welding equipment is in good repair.
d. Attend and actively participate in training sessions; and

e. Protect nearby personnel and passers-by against heat; sparks, etc. when working in occupied buildings.

4. Fire Watch Responsibilities:
   a. Ensure proper fire fighting equipment is readily available;
   b. Locate the nearest fire alarm pull station;
   c. Inspect hot work area before any hot work is conducted;
   d. Extinguish fire ONLY when within trained capabilities to safely do so
   e. Stay on watch at least thirty minutes after hot work has been completed.
   f. Ensure that safe conditions are maintained during hot work operations.

5. Department of Environmental Health and Safety Responsibilities:
   a. Update Hot Work Program as needed;
   b. Provide assistance with Program implementation and administration; and
   c. Provide assistance in training supervisors, employees, and project managers.

6. Contractor Administrators:
   a. WMU project managers are responsible for ensuring that outside contractors follow hot work procedures when working on the WMU campus and other properties.

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