

HOT WORK PERMIT PROGRAM SAMPLE POLICY

OBJECTIVE:

To establish requirements for performing hot work during maintenance and construction activities county facilities.

POLICY:

All county employees and outside contractors who may be involved in “hot work” activities shall comply with all aspects of this program which is in compliance with OSHA 29 CFR 1910.252 (Welding, Cutting & Brazing) and NFPA 51B (Standard for Fire Prevention During Welding, Cutting, and Other Hot Work).

SCOPE:

This program is designed to prevent injury and loss of property from fire or explosion as a result of hot work in county facilities, spaces and activities.

The program covers welding, torch cutting, brazing, soldering, grinding, heat treating, power-actuated tools, thawing frozen pipes by torch, torch applied roofing, and all other applications producing sparks, flames, or heat.

RESPONSIBILITIES:

- **MANAGEMENT:** - Management is responsible for the safe operations of hot work activity:
 - Designate a Permit Authorizing Individual (PAI) (Safety/Loss Prevention/Risk Management).
 - Establish permissible areas for hot works.
 - Ensure only approved equipment is used.
 - Ensure equipment is safe for use and properly repaired by a qualified person before use, when repairs are needed.
 - Ensure employees and contractors are familiar with the standard.

- Ensure employees are trained and aware of the risks and emergency procedures.
- Advise contractors of any fire hazards and risks.
- **PERMIT AUTHORIZING INDIVIDUAL (PAI)** - PAI (Safety/Loss Prevention/Risk Management) is responsible for:
 - The safe operation of hot work activities.
 - Determining site-specific flammable materials, hazardous process, or other potential fire hazards in the work area.
 - Considering alternatives with management.
 - Not allow hot work if:
 - The work cannot be moved to location free of combustibles.
 - Combustibles cannot be moved to a safe distance or shielded against ignition.
 - Determine that fire protection and extinguishing equipment are properly located at the work site.
 - Ensure that a fire watch is at the site (if a fire watch is needed).
 - Check ½ hour after the completion of the work for smoldering fires (if a fire watch is not needed).
 - Post the permit at the work site.
- **HOT WORK OPERATOR** - Hot Work Operator is responsible for:
 - Handling hot work equipment safely and not endanger lives and/or property.
 - Getting PAI's approval before starting hot work activities.
 - Examining equipment to ensure it is in safe operating condition.
 - Stopping work and notify PAI and management if unsafe conditions develop.
- **FIRE WATCH**
 - Fire watch shall have fire extinguisher equipment readily available and be trained in its proper use.
 - Be familiar with facility and procedures for sounding the alarm system in the event of a fire.
 - Watch for fires in all exposed areas.
 - Try to extinguish fires within the capabilities of the extinguishing equipment and not putting themselves or others in danger.
- **CONTRACTORS**

- Before starting any hot work, contractors and the county shall discuss the project completely including the type of hot work to be conducted and the hazards in the area.
- Contractors must ensure that their employees are trained in the proper procedures for hot work.
- **MUTUAL RESPONSIBILITY** - Safety in hot work activities shall be recognized by:
 - Management
 - Contractor
 - PAI
 - Fire Watch
 - Hot Work Operator

FIRE PREVENTION PRECAUTIONS

- Hot Work may only be performed in:
 - Permissible Areas
 - Areas that are or have been made fire safe
 - Designated Areas
 - Areas approved for hot work (welding shops)
 - Permit Required Areas
 - Areas made fire safe by removing or protecting combustibles from ignition
- Non-Permissible Areas
 - Areas not authorized by management for hot work activity

HOT WORK PERMIT

- A written Hot Work Permit (Appendix A) shall be required before hot work activity begins in a non-designated area; the permit will be prepared and issued by the PAI.
- Before the permit is authorized:
 - The work area must be made fire safe.
 - Equipment must be in safe operating condition.
 - Combustibles must be moved or covered with fire retardant or non-combustible material.

- Area must be swept clean of combustibles or kept wet for a 35 foot radius (hot work operators must use proper PPE to protect themselves from possible shock if floor is to be kept wet).
- Cracks in walls, floors, or ducts within a 35 foot radius must be covered with fire retardant or non-combustible material.
- Shield or guard combustible walls, partitions, ceilings, or roofs.
- Fully charged and operable fire extinguishers, appropriate for the type of fire shall be readily available.
- If sprinkler heads are close to the hot work, a wet rag shall be laid over the head and removed when hot work is completed.
- The PAI shall determine the length of time the hot work permit is valid (should not be for longer than one shift).
- The PAI shall inspect the area at least once per day while permit is in effect to ensure the area is still fire safe.
- The PAI shall post the permit at the work site.
- A fire watch shall be required by the PAI when hot work is to be performed in a location where other than a minor fire might develop:
 - Where combustibles are closer than 35 feet from the hot work.
 - Where combustible materials are adjacent to the opposite side of walls or partitions and likely to be ignited.
 - Shall be maintained for at least ½ hour after the completion of the hot work to detect and extinguish any smoldering fires.
 - Multiple fire watches may be necessary.

RECORD KEEPING

- All completed Hot Work Permits shall be kept on file for a period of at least one year.
- All Hot Work Permit Program training records shall be maintained by the PAI.

HOT WORK PERMIT

Seek an alternative/safer method if possible!

Before initiating hot work, ensure precautions are in place as required by NFPA 51B and ANSI Z49.1.
Make sure an appropriate fire extinguisher is readily available.

This Hot Work Permit is required for any operation involving open flame or producing heat and/or sparks. This work includes, but is not limited to, welding, brazing, cutting, grinding, soldering, thawing pipe, torch-applied roofing, or chemical welding.

Date _____	Hot work by <input type="checkbox"/> employee <input type="checkbox"/> contractor
Location/Building and floor _____	Name (print) and signature of person doing hot work _____
Work to be done _____	I verify that the above location has been examined, the precautions marked on the checklist below have been taken, and permission is granted for this work. Name (print) and signature of permit-authorizing individual (PAI) _____
Time started _____ Time completed _____	
THIS PERMIT IS GOOD FOR ONE DAY ONLY	

- Available sprinklers, hose streams, and extinguishers are in service and operable.
- Hot work equipment is in good working condition in accordance with manufacturer's specifications.
- Special permission obtained to conduct hot work on metal vessels or piping lined with rubber or plastic.

Requirements within 35 ft (11 m) of hot work

- Flammable liquid, dust, lint, and oily deposits removed.
- Explosive atmosphere in area eliminated.
- Floors swept clean and trash removed.
- Combustible floors wet down or covered with damp sand or fire-resistive/noncombustible materials or equivalent.
- Personnel protected from electrical shock when floors are wet.
- Other combustible storage material removed or covered with listed or approved materials (welding pads, blankets, or curtains; fire-resistive tarpaulins), metal shields, or noncombustible materials.
- All wall and floor openings covered.
- Ducts and conveyors that might carry sparks to distant combustible material covered, protected, or shut down.

Requirements for hot work on walls, ceilings, or roofs

- Construction is noncombustible and without combustible coverings or insulation.
- Combustible material on other side of walls, ceilings, or roofs is moved away.

Requirements for hot work on enclosed equipment

- Enclosed equipment is cleaned of all combustibles.
- Containers are purged of flammable liquid/vapor.
- Pressurized vessels, piping, and equipment removed from service, isolated, and vented.

Requirements for hot work fire watch and fire monitoring

- Fire watch is provided during and for a minimum of 30 min. after hot work, including any break activity.
- Fire watch is provided with suitable extinguishers and, where practical, a charged small hose.
- Fire watch is trained in use of equipment and in sounding alarm.
- Fire watch can be required in adjoining areas, above and below.
- Yes No Per the PAI/fire watch, monitoring of hot work area has been extended beyond the 30 min.

FIGURE A.5.4.1 Sample of a Hot Work Permit.