

Hot Work Procedure

Standard 29 CFR Part 1910.252

OSHA

Presented by: BKS Partners

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Today's agenda

- Introduction
- Hazards of welding, cutting and brazing
- Hot work precautions
- Hot work procedures
- Fire watch duties
- Conclusion

What is hot work?

Hot work consists of jobs like welding, cutting, grinding and use of torches in areas that are not designed for such activity.

Hot work accounts for a significant number of serious fires in business and industry every year due to the hot work causing accidental fire.

A Hot Work Procedure minimizes the chance that such a fire will occur in our facility.



Hot work hazards

- Performing hot work in areas that are not designed for operation of flame- or spark-producing equipment can cause an accidental fire because of:
- Flame contact with combustible material
- Sparks settling in combustible material, often falling through a hole in the floor or wall
- Heat transmitted through pipes, ducts or conduit to a remote combustible material
- Ignition of flammable vapor or dust in the air



Hot work precautions

- All fixed fire protection systems must be in operation
- A Hot Work Permit must be completed and a trained fire watch assigned
- All flammable and combustible material must be kept at least 35 feet away from the job area. You may also have to use a meter to check flammable gas, vapor or dust levels.
- Combustible material that can not be moved must be protected with fire proof tarps or shields



Hot work precautions

- Wall and floor openings must be plugged with fire proof material
- Use shields to protect others from weld flash
- Enclosed equipment that contained flammable or combustible material must be cleaned and purged
- If necessary, a Confined Space Entry Permit must be secured

Hot work procedures

1. A Hot Work Permit must be completed and signed for all work involving: welding, cutting, grinding, soldering, brazing and use of torches or flames
2. The Hot Work Permit must be signed by your supervisor after necessary precautions are taken (permit duration is 8 hours)
3. The Hot Work Permit must be displayed at the job site until job completion
4. A fire watch must be at the job site until one half hour after the job completion
5. Expired Hot Work Permits are retained for facility records

Hot Work Permit sample

Hot Work Permit

Date: _____

Time: _____ AM/PM

Floor/Location: _____

Fire Watch: _____

Permit Expiration: _____ AM/PM (not valid longer than one shift)

WELDING/BRAZING

FLAME CUTTING/TORCHING

SOLDERING

GRINDING

OTHER _____

PRECAUTIONS

- Cutting and welding and other equipment in safe condition
- Trained fire watch assigned
- Area personnel notified of the job
- Fire suppression and alarm systems operational
- Fire extinguishers at site (minimum 10 lb. ABC dry chem.)
- Flammable and combustible liquid moved at least 35 feet
- Combustible materials moved 35 feet or covered with fire resistant covers
- Wall, floor and other penetrations within 35 feet covered
- Floor swept and free of combustibles, combustible flooring wet down or covered
- Enclosed equipment has been cleaned and purged of flammable vapor and dust
- Confined Space Entry Permit issued (if required)
- Fire watch will check areas above, below and to the sides of the job site

Supervisor Approval: _____

Fire Watch Final Inspection: _____

(30 minutes after conclusion of the job)



Fire watch duties

Definition: A fire watch is a worker trained and assigned to stay in the area of hot work and look for any evidence of an accidental fire.

Duties:

- Have fire extinguishing equipment available for immediate use and be prepared to turn in a fire alarm
- Watch for any hazardous conditions and stop the hot work in the event of any potential fire hazard development
- Continually check all areas where a fire could start ***including:*** the floor below and floor above and the opposite side of walls and partitions
- Keep all fire proof tarps and shields in place
- Remain in constant attendance (including breaks and lunch) until 30 minutes after the job is complete

Fire watch summary

- Keep the area **safe** and free of fire hazards
- **Communicate** with the person performing hot work
- **Move** – keep circulating to look for fire spread above, below and to the sides of the job site
- Be prepared to **respond** to a fire: activate the alarm and try to fight the fire (if safe)
- **Stay** in the area until 30 minutes after the job wraps up

Conclusion

Hot work is potentially hazardous to people and to our facility. By following the Hot Work Procedure, the hazards are minimized and, even if a fire starts, we can respond in a manner to protect lives and property.

For more information

For more information regarding Hot Work Procedures or other safety issues please contact:

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