

Hot work procedures

By Mark J. Mullins



Review your facility's hot work permitting procedures and process. Bring copies as handouts. Identify any incidents or near hits (miss) incidents that occurred as a result of performing hot work. Make this meeting a discussion rather than a lecture, soliciting input from the employees.

For more information on hot work requirements, see the OSHA Code of Federal Regulations 29 1910.252 titled Welding, Cutting and Brazing and Code of Federal Regulations 29 1926.35, titled Fire Prevention.

Introduce the topic by pointing out that every year, fires occur throughout industry which could have been prevented had employees used a hot work permitting process. This includes effective hot work procedures, training, communications among employees, inspections and periodically auditing the process to ensure compliance and safety.

Explain that hot work is any work using an open flame or other sources of heat that could ignite materials in the work area.

Ask what operations involve open flame or other sources of ignition.

- Welding
- Brazing
- Propane soldering
- Grinding that could generate a spark
- Burning
- Oxyacetylene cutting
- Use of powder-actuated tools, portable electric tools and any other open flame or spark-producing equipment

Ask whether they can think of any incidents or near hit incidents at this facility that involved hot work. Have the employees give examples and/or review past incidents.

Ask what operations and locations in our facility should require a hot work permit. Have the employees name the potential areas.

Ask what questions should be considered before beginning hot work. Possible questions may include:

- Does everyone understand the scope of the work?
- Have all the affected employees been notified?
- Have security, emergency response personnel and affected workers in the area been notified?
- Has the permit been filled out?
- Has the area been inspected before hot work is to start?
- Are all flammables/combustibles removed from the area?
- Has the area been evaluated to ensure that no flammable vapors are present?
- Is a fire extinguisher available?
- Are immovable fire hazards covered with a tarp or other non-combustible covering?
- Have employees been told to immediately stop hot work if conditions change, odors become present, etc., until the area is re-inspected?

The questions below should serve as a means to determine if your employees have a thorough understanding of your hot work permit process.

Ask who is responsible for inspecting the area prior to hot work.

The area supervisor is responsible.

Ask how long hot work permits are valid. Permits usually are valid only for the length of the working shift; but never more than 24 hours.

Ask what a fire watch is. A fire watch is an employee familiar with the work to be done, who watches whenever welding, cutting or other hot work is performed.

- A fire watch may not do any other job that would distract from his or her primary responsibility.

Ask what does the person serving as fire watch need to know.

The fire watch needs to know:

- How to summon help;
- How to report emergencies;
- The facility's emergency evacuation procedures;
- How to use a fire extinguisher.

Ask once hot work is complete, what should be done before leaving the area. Inspect the area within 30 minutes to verify there are no smoldering fires.

References

Publications

- NFPA 51B, Standard for Fire Prevention During Welding, Cutting, and Other Hot Work, National Fire Protection Association.

Web sites

- Hot Work Permits (eLCOSH): www.elcosh.org/record/document/516/d000502.ppt
- Hot Work (Canadian Centre for Occupational Health and Safety): www.ccohs.ca/oshanswers/safety_haz/welding/hotwork.html
- Ship Repair, Hot Work (Occupational Safety and Health Administration): www.osha.gov/SLTC/etools/shipyard/shiprepair/hotwork/hotwork_operations.html

Videos

BWC's Division of Safety & Hygiene's video library has a number of videos on hot work, welding and cutting and fire prevention. These are available for loan to Ohio employers. Order a catalog by calling 1-800-OHIOWC (ask for the video library), or visit our Web site, ohiobwc.com.

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