



Hot Work & Fire Watches

Toolbox Talk Lesson Plan

Hot Work is defined as ‘work that involves welding, flame cutting, or other fire or spark-producing operation’.

ASK STUDENTS: “*What operations do we perform that fall under that definition?*”

Answers should include:

- Arc welding
- Sweating pipes
- Oxy-acetylene cutting
- Using torch to loosen bolt
- Grinding metal
- Torches used for roofing
- Soldering
- Brazing
- Thawing pipes

New Jersey Fire Code, NFPA, and NJPEOSHA give the following guidance when performing hot work:

1. Work with the local fire official to establish designated hot work areas in the facility to perform hot work when practical. Permits may be needed for work outside designated areas.
2. Establish a Hot Work Permit program. A model program is available on the MEL website under the SAFETY tab. *Hold up a copy of your Program.*
3. Remove, cover, or wet-down combustible materials in the area of the hot work. Cover openings where sparks or slag can enter. *Describe availability of fire-resistant tarps.*
4. Perform a hazard assessment of the work and area. This should include using a gas monitor to verify the area is clear of flammable vapors. Hot work equipment should be inspected before beginning work.
 - a. Electric arc welding cables may not have damaged coverings. Connections should be tight.
 - b. Test oxy-acetylene connections with soapy water for leaks. Hoses must be in good condition. *Demonstrate how to test with soapy water.*
 - c. Cylinders must be located away from hot work to protect against radiant heat or sparks.
5. Complete the Hot Work Permit. *Hold up and review the layout & information of the form.*
6. A second employee must act as Fire Watch.
 - a. A Fire Watch is a person trained and immediately available to use a fire extinguisher. The fire extinguisher must be rated at least 2A:20B:C (10# or 20# ABC powder extinguisher) and it shall be located within 30 feet of the hot work operation.
 - b. The Fire Watch monitors the operation and surveys the area for hazardous conditions that may develop. They should be educated in fire behavior and the potential hazards of welding or cutting,
 - c. The Watch lasts for the duration of the work and at least 30 minutes after hot operations have ceased. The area should be checked before concluding the Fire Watch.
7. Hot Work Permits must be available for review by the local Fire Official for at least 48 hours after the completion of the hot work. *Review who will maintain the Permit for review if asked.*
8. Retain training records of hot work operator and Fire Watch for at least 1 year.

*This lesson plan is intended for general information purposes only. It should not be construed as legal advice or legal opinion regarding any specific or factual situation. Always follow your organization’s policies and procedures as presented by your manager or supervisor. For further information regarding this bulletin, please contact your Safety Director at 877.398.3046. **Presenters should attach sign-in sheet to this lesson plan.***