

16. HOT WORK

IDENTIFY THE HAZARD. CONTROL THE RISK. PREVENT FIRES. PROTECT LIVES.



CORPORATE SAFETY
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WHY THIS MATTERS

Hot work is any work that produces heat, sparks, or flame and can ignite flammable materials.

Proper planning, controls, and permits prevent fires, injuries, equipment damage, and downtime.

Plan the work.
Control the risk.
Do it safely.



COMMON HAZARDS

FIRE / EXPLOSION
Sparks or heat can ignite flammable materials, vapors or gases.

BURNS
Contact with hot surfaces, sparks, or molten metal can cause serious burns.

TOXIC FUMES
Fumes, gases, or smoke can cause health effects or asphyxiation.

ELECTRICAL HAZARDS
Damaged leads or equipment can cause shock or fire.

COMPRESSED GASES
Cylinders can leak, explode, or tip over if not handled properly.

5 STEPS TO SAFE HOT WORK

- PLAN**
Identify hazards. Eliminate or control them. Determine if hot work is necessary.
- GET PERMIT**
Obtain a Hot Work Permit. Review conditions and controls.
- PREPARE AREA**
Remove combustibles. Cover or shield exposures. Protect openings.
- CHECK EQUIPMENT**
Inspect equipment, tools, and leads. Ensure fire extinguisher is ready.
- PERFORM & MONITOR**
Wear proper PPE. Maintain fire watch. Monitor area during and after work.

HOT WORK EXAMPLES

- Welding
- Cutting
- Brazing
- Grinding / Use of grinders
- Soldering
- Thermal spraying
- Use of open flame
- Thawing pipes
- Any work producing heat, sparks, or flame

DO'S - FOLLOW THESE

- Obtain a valid Hot Work Permit.
- Remove combustibles at least 10 m (35 ft) from the work area.
- Shield or cover combustibles that cannot be moved.
- Protect wall and floor openings.
- Ensure ventilation is adequate.
- Use the right tools and inspect before use.
- Keep a fire extinguisher & fire blanket nearby.
- Have a trained fire watch during and after hot work (minimum 30 minutes).
- Wear proper PPE.
- Stop work if conditions change.



DON'TS - AVOID THESE

- Don't start hot work without a permit.
- Don't work in areas with flammable vapors or gases.
- Don't leave hot work unattended.
- Don't use damaged tools, leads, or hoses.
- Don't wear flammable clothing.
- Don't allow combustibles to accumulate.
- Don't rely on alarms or sprinklers.
- Don't skip the fire watch.



FIRE WATCH REQUIREMENTS

- Trained and assigned before work begins.
- Remain on duty during hot work and for at least 30 minutes after completion (or as required).
- Watch for fire, smoke, or unusual heat.
- Have communication with workers.
- Have means to raise alarm.
- Know what to do in an emergency.
- Document fire watch time on the permit.



HOT WORK PERMIT CHECKLIST

Work location and description: _____
 Date: _____ Time: _____
 Permit valid from: _____ to: _____

- Combustibles removed / protected
- Wall, floor and roof openings protected
- Ventilation adequate
- Fire extinguishers and fire blanket available
- Equipment inspected and in good condition
- PPE available and used
- Fire watch assigned: _____ Time: _____
- Emergency plan reviewed
- Other controls: _____

Authorized by: _____ Date: _____

Permit must be kept on site during hot work.

DISCUSSION QUESTIONS

- What is considered hot work?
- What are the main hazards of hot work?
- Why is a Hot Work Permit required?
- Who is responsible for fire watch?
- What should you do if conditions change during hot work?



REAL-LIFE EXAMPLE

During maintenance, a worker was cutting a pipe in an area where insulation debris was hidden above a ceiling. Sparks traveled through an opening and ignited the debris, causing a fire and production shutdown.

Proper planning, area inspection and protection, and fire watch could have prevented this incident.



IF YOU SEE SOMETHING, SAY SOMETHING

Report unsafe conditions, near misses, or missing equipment.
 Speak up. It could save a life.



EMERGENCY ACTION

- Raise the alarm.
- Stop work.
- Use the right extinguisher or fire blanket.
- Evacuate if the fire cannot be controlled.
- Call emergency services.



REMEMBERS Identify the hazard, control the risk.

Control hazards. Prevent fires.

Fire watch saves lives.

Everyone is responsible.

Go home safe every day.

SUPERVISOR SIGN-OFF
 Discussed with crew by: _____ Date: _____

SAFETY MESSAGE
 Good planning and safe practices make hot work safe work.

