

# Safety Facts: Hot Work\*



Hot work is work that creates sparks or a flame (i.e. tiger torch), or a fire that must be monitored after being extinguished.

## Why is it important?

Hot work introduces ignition sources to flammable materials or vapour clouds. These could possibly ignite or explode. Learn to recognize and prevent the hazard to avoid catastrophic consequences.

## Key characteristics of hazard

Understand your company's policy on hot work including designated hot work safe zones and permit required areas. Note hazards like:

- areas with combustible dust accumulations
- areas of toxic, explosive, or oxygen-enriched atmospheres
- containers that held flammable liquids/flammable vapors

Clearly communicate so that no hot work processes take place in areas where the fire protection systems have been taken out of service or disabled.

**Designated areas** approved for hot work for routine hot work operations.

**Permitted areas** are areas where hot work does not normally take place. Evaluate these areas before doing hot work. Determine what is necessary for hot work to take place such as placement of fire blankets or cleanup activities.

Do not authorize hot work until after protective measure and cleanup are done. Permits will specify monitoring, precautionary procedures, and the fire suppressions equipment to be available. Company policy determined the need for fire watch attendants.

## Associated risks

Regarding training and supervision:

- Train supervisors to authorize hot work activities.
- Train workers and contractors to not undertake hot work without authorization
- Train fire watch attendants in fire suppression, sounding the alarm, and emergency response
- Train managers to coordinate fire sprinkler maintenance. Maintenance should not coincide with major shutdowns that require hot work activities

Manage the storage of flammable materials so that ignition risk is kept low.

Workers doing regular inspections should watch for fuel accumulations (e.g. combustible dust), poor storage of flammable products, and compliance with hot work procedures.

## Preventative next steps

- Determine what hot work activities take place in your facility
- Try to segregate hot work into zones to allow for the removal of combustibles and installation of additional fire protection equipment
- Create a hot work program and policy so that everyone understands where to conduct hot work and how to do it safely
- Update contractor policy for hot work
- Conduct training for employees
- Conduct fire suppression training and fire attendant training
- Conduct workplace inspection training for JHSC members so they can identify fire risks on inspections.



## For additional resources visit:

CSA Standard: [CAN/CSA-W117.2-12 Safety in welding, cutting, and allied processes](#)

NFPA Standard: [NFPA 51B](#) is a comprehensive reference document that provides additional information on safe hot work practices. However, it should be noted, that NFPA 51B specifies 11 m (35 ft) clearance between hot work and combustibles, whereas in Canada, the required clearance is 15 m (50 ft) minimum.

Manufacturing Safety Alliance of BC: [safetyalliancebc.ca](http://safetyalliancebc.ca)

