

Hot Work

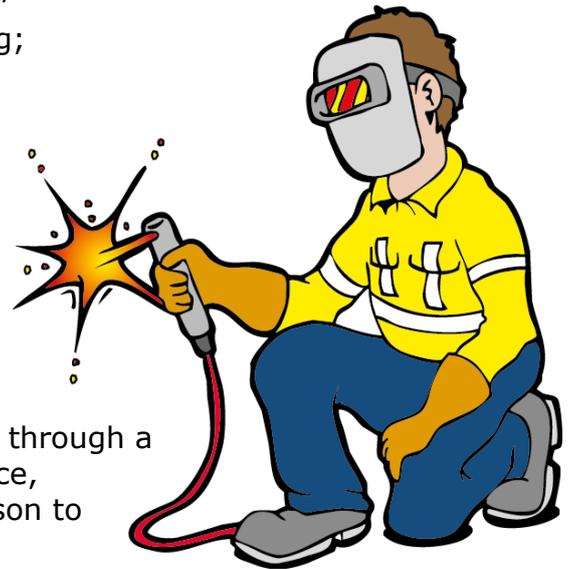
Fact: Undertaking hot work in areas where flammable or combustible chemicals or other materials are present creates a significant risk of fire or explosion. A hot work permit system is a system designed to eliminate or minimise risks from these activities by controlling when and how hot work is undertaken in these areas.



General Safety Tips

Hot Work is work that can generate flames, heat or sparks and includes, but is not limited to, the following:

- Oxy - acetylene cutting or gas burning;
- Welding, brazing or electric arc welding;
- Soldering;
- Heat gun operation;
- Heating and driving rivets;
- Use of open flames;
- Abrasive blasting; and
- Grinding;



Responsible Person means a person who has, through a combination of training, education and experience, acquired knowledge and skills enabling that person to perform correctly a specified task.

Hot work presents two significant hazards

1. Open flames or flying sparks that can ignite flammable gases and vapors; and
2. Heat producing operations that may include furnaces, boilers and other process engineering that involves hot and / or molten materials.

If you are proposing to conduct hot work, you or your Supervisor need to conduct a risk assessment

Always conduct a risk assessment before any controls are implemented and a risk assessment after the controls are implemented to ensure the risk has been reduced.

Where generic type hot work is carried out a generic risk assessment may be used for several work situations, however these risk assessment must be on the job and discussed by staff before hot work is commenced.



Always be aware of what you are doing when conducting hot work.

Hot Work Permit

Prior to the commencement of hot work, the following precautions shall be taken to prevent any fire, explosion, injury or other danger developing during the performance of the hot work:

1. The Supervisor will check the 'Register of Responsible Person allows to complete a Hot Work Permit' before starting any hot work;
2. Identify and control any hazard (including the presence of flammable or combustible liquids, gases, vapours, dusts, fibres or substances) within or near the hot-work area (usually 30m should separate the work from material);
3. Consider the possibility of changing circumstances during the progress of the hot work and whether they may render the area unsafe for the work to continue;
4. Ensure if possible, the ventilation of the hot work area;
5. Test for the presence of any flammable gas or flammable vapour, in the atmosphere within any pipe, drum, tank, vessel and piece of equipment adjacent to or involved in the hot-work;
6. Fire detection systems may have to be isolated;
7. If the hot work is in a confined space a 'Entry permit' must be completed and all steps followed, particularly testing and monitoring of the atmosphere;
8. The responsible person is to complete a 'Hot Work Permit' before any hot work is commenced and will explain it to you;
9. The responsible person is to check if fire training has been completed for staff conducting hot work;
10. Ensure that the correct PPE is worn;
11. Ensure that suitable fire fighting equipment is on hand; and
12. Report any concerns to the responsible person.

Training

The supervisor is to ensure that employee's conducting hot work have training and supervision or have been assessed as competent in:

- The hazards of hot work;
- Risk assessment and control processes;
- Emergency procedures;
- Fire Protection; and
- The Hot Work Permit system.

Fire Watch

1. A fire watch person may need to be nominated to watch for any outbreaks of smoke or fire;
2. This may need to be done for at least 60 minutes after the hot work has been completed in certain work environments; and
3. The fire watch person/s are to have fighting equipment readily at hand and must be familiar with its use.



Following a few simple rules can save you from suffering.

Legislation:

Work Health and Safety Act 2011 (Qld)

Work Health and Safety Regulation 2011 (Qld)

Confined Spaces Code of Practice 2011

Risk Management 2007 Code of Practice

Australian Standard AS1674.1-1997, Safety in Welding & Allied Processes – Fire Precautions

Australian Standard AS1674.2-2007, Safety in Welding & Allied Processes – Electrical

Australian Standard AS 2865 – 2009 Confined spaces

Australian Standard AS1940-2004: The storage and handling of flammable and combustible liquids