

# HOT WORK GUIDELINE

A fire safety code of practice for the  
undertaking of hot work

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Hot Work Guideline  
Version 2.0, September 2022

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## 1. Introduction

Hot work is defined as heat-producing or spark-producing activities such as grinding, welding, thermal or oxygen cutting or heating.

Hot work has the potential to start building fires and bushfires and to damage property. Every year in Tasmania, properties are damaged by ignitions started by hot work and most of these are avoidable by using safer practices.

## 2. Scope

This Guideline has been developed by the Tasmania Fire Service (TFS) to provide fire safety guidance for the undertaking of hot work.

## 3. Application

This Guideline is applicable all year round to all hot work activities in both urban and rural areas in Tasmania. The focus is hot work in the open air but hot work in roofs, under floors and within buildings can be equally dangerous and damaging.

This Guideline does not replace or negate any requirement that may otherwise apply when undertaking hot work, and therefore must be read in conjunction with any other recommended or mandatory requirement.

## 4. Undertaking Hot Work

### 4.1 On all days

#### 4.1.1 Prior to Hot Work

Before commencing hot work, the responsible person must:

- i. Ensure machinery and apparatus are in working order and comply with relevant standards;
- ii. Have suitable fire extinguishing agents and equipment available at the work site;
- iii. Have suitable means to immediately notify the TFS in case of emergency;
- iv. Undertake a thorough inspection of the work area to identify potential hazards, such as – flammable liquids, vapours, gasses, combustible liquids, dust, fibres, other flammable or explosive substances;
- v. Completely remove or sufficiently drench dry grass and similar potential bushfire fuels for a distance of at least 3 metres around, below and above the work area;
- vi. Install fire-resistant protective guards over materials that may be affected by sparks, slag, hot metal particles, electrode stubs, off-cuts, and the like;

- vii. Implement suitable measures to manage hazards identified to prevent fire or explosion; and
- viii. Ensure compliance with Australian Standard AS1674.1, when undertaking hot work in a hazardous area.

#### 4.1.2 During Hot Work

When undertaking hot work, the responsible person must:

- i. Ensure equipment and apparatus is used in accordance with manufacturers recommendations and relevant procedures and standards;
- ii. Maintain an awareness of the potential for heat transfer through walls and other solid materials, and the dispersal of sparks, slag, hot metal particles, electrode stubs, off-cuts, and the like;
- iii. Be alert to the outbreak of fire, and undertake periodic checks in and around the work area;
- iv. Prevent any sparks, slag, hot metal particles, electrode stubs, off-cuts, and the like from accumulating or lodging in places that may cause a fire; and
- v. Take immediate action to extinguish any fire.

## 4.2 On days of Total Fire Ban

### 4.2.1 Total Fire Ban Declaration

The TFS may declare a Total Fire Ban on days with elevated fire danger.

Elevated fire danger means fires are easier to ignite, are likely to develop rapidly and then are harder to control. This results in more damage with increased costs to the community. Usually, a Total Fire Ban is declared for a single day.

Days of Total Fire Ban are advertised in daily newspapers, on television and radio and on the TFS website.

A Total Fire Ban declaration will detail the time period of the Ban, the location where the Ban applies, and any restrictions or other conditions which apply during the Ban.

The TFS may permit hot work to be undertaken outdoors during a Total Fire Ban. If permitted, this will be included in the declaration.

Operators of machinery or apparatus must carefully check the details of restrictions within a Total Fire Ban declaration to ensure hot work is permitted.

### 4.2.2 Emergency Restoration of Critical Infrastructure

Usually, the declaration of a Total Fire Ban will include a condition which allows emergency works for the restoration of critical infrastructure. Where the emergency works include hot work, the responsible person must:

- i. Comply with all relevant parts of Section 3 of Australian Standard AS1674.1;

- ii. Comply with all use requirements contained within this Guideline;
- iii. Notify the TFS of the intention to undertake hot work, including details of:
  - a) Location of the hot work (i.e. street address);
  - b) Starting time and duration of the hot work; and
  - c) Contact details of the responsible person.
- iv. Ensure a Hot Work Permit is completed in accordance with AS1674.1;
- v. Provide for continuous and thorough monitoring (fire-watch) during and immediately after the hot work;
- vi. Ensure, if the hot work is outside a reticulated water area, that either:
  - a) The following minimum firefighting equipment is located at the hot work area:
    - a mobile tank, containing not less than 300 litres of water, and the means to move it;
    - a standard pump;
    - a standard hose;
    - a standard nozzle;
    - standard fittings; and
    - two (2) pulaskis, fire rakes or grubbing hoes; or
  - b) The hot work area is entirely free of combustible material, or combustible material is appropriately shielded and sufficiently wetted, and the following minimum firefighting equipment is located at the hot work area:
    - two (2) 9 litre water extinguishers (or equivalent extinguishers for the type of fire hazard) that comply with the relevant Australian Standard and are maintained in accordance with AS 1851.1.
- vii. Ensure, if the hot work is within a reticulated water area, that either:
  - a) The following minimum firefighting equipment is located at the hot work area:
    - a standard fire hydrant;
    - standard fittings;
    - a standard hose; and
    - a standard nozzle; or
  - b) The hot work area is entirely free of combustible material, or combustible material is appropriately shielded and sufficiently wetted, and the following minimum firefighting equipment is located at the hot work area:

- two (2) 9 litre water extinguishers (or equivalent extinguishers for the type of fire hazard) that comply with the relevant Australian Standard and are maintained in accordance with AS 1851.1.
- viii. Ensure that all fire suppression equipment is in working order, connected and tested for correct operation prior to commencing hot work; and
- ix. Ensure hoses have sufficient length to reach fifteen (15) metres all around the work area.

#### 4.2.3 Planned Essential Maintenance of Critical Infrastructure

Where the TFS permits hot work during a Total Fire Ban, and essential maintenance is planned to be undertaken on critical infrastructure, and that maintenance cannot reasonably be delayed until another time, the following conditions apply to hot work:

- i. Shall comply with the requirements of Section 4.2.2 of this Guideline;
- ii. Shall not be undertaken within a bushfire-prone area;
- iii. May only be undertaken by, or on behalf of the following utility providers:
  - a) Taswater
  - b) TasRail
  - c) TasNetworks
  - d) TasPorts
  - e) State Growth
  - f) Hydro Tasmania
  - g) Municipal and City Councils
  - h) Tasmanian Gas Pipeline
  - i) Tas Gas Networks

## 5. Further Information

- For more fire safety information and to check if there is a Total Fire Ban: [www.fire.tas.gov.au](http://www.fire.tas.gov.au)
- For more hot work safety information, including *welding code of practice*: <https://worksafe.tas.gov.au/>
- To notify Tasmania Fire Service of the intention to undertake hot work during a Total Fire Ban: 1800 000 699

## Glossary

### AS1674.1

Australian Standard AS1674.1 *Safety in welding and allied processes – Fire precautions.*

### Bushfire-prone Area

Land that is within the boundary of a bushfire-prone area shown on an overlay on a planning scheme map; or

Where there is no overlay on a planning scheme map, land that is within 100m of an area of bushfire-prone vegetation equal to or greater than 1 hectare.

Further information: <http://www.fire.tas.gov.au/Show?pagelId=colBushfireProneAreas>

### Critical Infrastructure

Has the same meaning as in the *Critical Infrastructure Resilience Strategy* (Commonwealth of Australia, 2010) – Those physical facilities, supply chains, information technologies and communication networks which, if destroyed, degraded, or rendered unavailable for an extended period, would significantly impact the social or economic wellbeing of the nation, or affect Australia's ability to conduct national defence and ensure national security.

### Fine Fuel

Fuel such as grass, leaves, bark, and twigs less than 6mm in diameter that ignite readily and are burnt rapidly when dry.

### Hazardous Area

Has the same meaning as in AS1674.1 – an area in which flammable liquids, vapours or gases, combustible liquids, dusts or fibres, or other flammable or explosive substances may be present.

### Hot Work

Has the same meaning as in AS1674.1 – grinding, welding, thermal or oxygen cutting or heating, and other related heat-producing or spark-producing operations.

### Hot Work Area

Has the same meaning as in AS1674.1 – the area within a radius of 15 metres from the point where the hot work is to be undertaken, including the space above and below that area.

### Responsible Person

Person with responsibility for undertaking the hot works and preventing any risks resulting from those works. Also, the same meaning as 'Responsible Officer' when undertaking hot work in a hazardous area.

### Standard Fittings, Hoses, Hydrant, Nozzles, Pumps

Has the same meaning as in the *Fire Service (Miscellaneous) Regulations 2017*.

### TFS

Tasmania Fire Service.





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