

## UON Key Risk Area: KRA 3.5

### Hot Work

#### 1. Purpose

To provide direction to minimise the risk of fire, explosion and property damage as well as resultant injuries caused by uncontrolled hot work.

#### 2. Scope

This document applies to all Faculties, Divisions, and organisational units of the University of Newcastle and its controlled entities.

#### 3. Definitions

In the context of this document, the following definitions apply:

- **Hot Work:** Any activity that will produce an open flame, significant heat or sparks including oxygen/fuel gas welding or cutting, brazing, soldering, electric arc welding, spot welding, mig and tig welding, mechanical chipping and/or grinding.
- **Designated Area:** An area where hot work is allowed at any time providing conditions are appropriate and proper safety precautions are taken.
- **Permit Required Area:** A “Permit Required Area” is any area that is not a “Designated Area” e.g. administration areas, laboratories, libraries, lecture theatres, classrooms, outdoor areas.
- **Competent Person:** A person who has, through a combination of training, education and experience, knowledge and skills enabling that person to correctly perform a specified task.
- **Leaders/Supervisors:** Any member of the University who is responsible for supervising staff and/or undergraduate or postgraduate students and/or for leading research projects.



- **Workers:** As defined in the NSW Work Health & Safety Act 2011, workers include employees, conjoints, students on work experience, contractors, sub-contractors and their employees. Staff, conjoints, students on work experience, and contractors may be referred to collectively as workers, or separately as staff, conjoints, students, or contractors.

## 4. Responsibilities

### 4.1 Infrastructure and Facilities Services (IFS)

- Ensure hot work is performed in accordance with this procedure;
- Ensure that contractors who are required to undertake hot work have the appropriate procedures, equipment and competent personnel to undertake the work;
- Ensure that any hot work is conducted under a Permit to Work issued by IFS or a nominated representative;
- Ensure that the area where hot work is conducted is returned safely to service on completion of the work and the Permit to Work is signed off;
- Provide information to affected locations where hot work is to be conducted to ensure the necessary actions are taken to protect staff and students who work in the area.

### 4.2 Leaders/Supervisors

- Ensure that risk controls are followed when they are implemented to protect staff and students when hot work is to be conducted.

### 4.4 H&S Team

- Provide professional input regarding hot work activities when required.

## 5. Procedure

### 5.1 Risk Assessment

- Prior to any hot work commencing IFS or the nominated representative will ensure that the hazards associated with the work will be identified, assessed and controls determined which will include operating under a Hot Work Permit where required;
- The requirement for a Hot Work Permit will be included in the contractor's Safe Work Method Statement (SWMS) or Job Safety Analysis (JSA);
- Work in proximity to the following high risk situations will always require a Hot Work Permit:

- Flammable hazardous substances and dangerous goods storage;
- Oxygen and other industrial gas cylinders;
- Combustible stored items e.g. boxes, archives;
- Electrical switch rooms and electrical cables;
- Vegetation;
- Working at height above personnel, plant and equipment.

## **5.2 Work Preparation**

Prior to issuing a Hot Work Permit, IFS or the nominated representative in consultation with the contractor engaged to conduct the work, will ensure all the following tasks are undertaken:

- The hot work area is inspected to check that it is properly prepared to minimise the risk of fire, explosion or exposure to toxic gases;
- Flammable and/or combustible materials are removed from the hot work area and relocated at least 20 metres away;
- All drains, floor openings and pipe gutters within the vicinity of the hot work area are plugged, to prevent the possibility of sparks, slag or hot metal off cuts falling onto combustible materials;
- All energy sources are isolated;
- Welding screens are provided as required to contain sparks and prevent welding flashes to other workers in the area;
- Emergency response requirements are determined and portable fire protection equipment provided e.g. fire extinguishers, fire blankets and fire hoses;
- A person is nominated to act as a fire watch;
- Appropriate personal protective equipment is provided;
- When the relevant persons have inspected the area and are satisfied that all the work preparation tasks have been completed, a Hot Work Permit will be issued to the contractor and signed off by all the workers involved on the job.

## **5.3 The Role of the Fire Watch Person**

A Fire Watch Person may be required to be in attendance for the duration of the work if it is not possible for the person performing the hot work to thoroughly observe the immediate surrounding work area while the work is being conducted. The following actions apply to the role:

- Sufficient Fire Watch Person(s) will be provided by the contractor to ensure adequate monitoring of potentially affected areas and to allow isolation of equipment in the event of a fire;
- The name(s) of the Fire Watch Person(s) will be recorded on the Hot Work Permit;
- Where the work may generate hot sparks, the Standby Person(s) will be equipped with suitable fire extinguishing equipment and ensure fire hoses are available in the immediate area if possible.

#### **5.4 Completing the Work**

On completion of the hot work, the following actions will be taken:

- Contractor will inspect the area and check for 30 minutes after completion of the hot work for any smouldering debris;
- The contractor will document the completion time in the Hot Work Permit, and return it to IFS or the nominated representative;
- IFS or the nominated representative will inspect the work area after the job has been completed to check the area has been left free from smouldering debris prior to signing off the Hot Work Permit and filing it;
- Hot Work Permit records will be maintained for seven years in accordance with company document control procedures;

## **6. References**

[NSW Work Health and Safety Regulations 2011.](#)

[NSW WorkCover Welding Processes Code of Practice](#)

[UON H&S Framework](#)

[UON HSP 4.1 H&S Risk Management](#)

[IFS Permit to Work Procedure](#)

## **7. Attachments**

Nil

## Document Control Table

<b>Hot Work – KRA 3.5</b>					
<b>Date of first edition:</b>	30/9/15	<b>Date this review will take effect:</b>	N/A	<b>Date of next Review:</b>	30/9/18
<b>RM Folder Ref:</b>	<completion by policy team>	<b>Document Number:</b>	KRA 3.5 V1	<b>Revision Number:</b>	N/A
<b>Approved by:</b>	Director, People and Workforce Strategy				
<b>Owner:</b>	Associate Director, Health and Safety				
<b>Contact:</b>	University of Newcastle Health and Safety Team				
<b>Governing Legislation:</b>	NSW Work Health and Safety Act and Regulations 2011,				
<b>Supporting documents &amp; forms of this procedure/guideline:</b>	UON H&S Management System Framework UON HSP 4.1 H&S Risk Management IFS Permit to Work Procedure				
<b>Keywords:</b>	Health and Safety; H&S; hot work; welding; grinding; Fire Watch				
<b>Important Notes:</b>	2nd version of this document				
<b>Revision History / Version Control</b>	N/A				