HS820 Permit To Work Procedure

Policy Hierarchy link	Work Health and Safety Act 2011 Work Health and Safety Regulation 2011 Work Health and Safety Policy
Responsible Officer	Director, UNSW Safety and Sustainability
Contact Officer	Manager, UNSW Health & Safety
Superseded Documents	• FM OHS F03 • FM OHS F05 • HS820 Permit to Work Procedure v1.3, approved 3 March 2016
File Number	2016/00369
Associated Documents	• HS329 Risk Management Procedure • HS017 Risk Management Form • HS336 Responsibility Authority & Accountability Procedure • HS707 Working at Heights Guideline • HS916 Working at Heights Permit • HS821 Hot Work Permit • HS822 Confined Space Entry Permit • HS823 HV Substation Entry Permit • HS699 Laboratory Clearance Certificate Guideline • HS700 Laboratory Clearance Certificate

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1. Purpose and Scope

The permit to work procedure provides a system for managing certain high risk activities at the University of New South Wales.

The purpose of the procedure is to:

- provide a level of control to ensure risks associated with certain work types are eliminated or minimised to prevent incidents occurring in the workplace; and
- provide a consistent and systematic approach to the control of specific activities occurring in the workplace.

This procedure is intended to provide information to those persons involved directly with the issuing or receiving of permits. This process authorises work only after safe procedures have been defined and they provide a clear record that all foreseeable hazards have been considered.

This procedure is applicable to all staff and contractors working at all University locations. Work activities include:

- non- routine; and
- the type of work that is not normally performed in the specified location.

2. Definitions

Competence: Demonstrated personal attributes and demonstrated ability to apply knowledge, skills and experience.

Confined Space: An enclosed or partially enclosed space that is not intended or designed primarily for human occupancy, within which there is a risk of one or more of the following:

- An oxygen concentration outside the safe oxygen range;
- A concentration of airborne contaminant that may cause impairment, loss of consciousness or asphyxiation;
- A concentration of flammable airborne contaminant that may cause injury from fire or explosion; or
- Engulfment in a stored free-flowing solid or a rising level of liquid that may cause suffocation or drowning.

Fall: means a fall by a person from one level to another that is reasonably likely to cause injury to the person or any other person.

Hot Work: Grinding, welding, thermal or oxygen cutting or heating, and other related heat-producing or spark-producing operations.

HV: High Voltage electricity (exceeding 1kV a.c.).

Risk of fall: means circumstances in which the worker or person is:

- In or on an elevated workplace from which a person could fall;
- In the vicinity of an opening through which a person could fall;
- In the vicinity of an edge over which a person could fall;
- On a surface through which a person could fall; or
- In any other place from which a person could fall.

Work: Any activity undertaken on behalf of UNSW.

3. Procedure

3.1 Permit to work

3.1.1 Activities requiring a permit to work

There are activities and types of work that have been deemed high risk which require a permit to be issued prior to work commencing. The following permits are in use at UNSW:

Permit type	Area	Title of person
Laboratory Clearance Certificate	All areas	Laboratory Manager
Confined Space	Buildings and Grounds	Area Manager
HV Substation entry	FM Engineering	UNSW FM – Area Manager
Hot Work	All areas	Project, contract manager or Area Manager
Height permit	All areas	Area Manager
Asbestos removal permit	FM	Project manager

Table 1: Description of UNSW permits and permit issuers

3.1.2 Exemptions

These exemptions apply only to Hot Work and Confined Space entry. All other permits are mandatory.

Permits are not required for:

- Work carried out in designated maintenance areas (e.g. University workshops or Faculty workshops).
- Areas that have been designated as a construction site and have been "handed over" to a principal contractor. A UNSW permit to work is not required; however the principal contractor must have a permit to work system in place that meets UNSW requirements.
- Work undertaken by the UNSW maintenance contractor. A UNSW permit is not required; however the maintenance contractor must have a permit to work system in place that meets UNSW requirements.

3.1.3 Authorisation

Work may only commence after the appropriate permit has been completed and issued by the permit issuer. A list of permit issuers who may issue and cancel permits are listed in section 3.1.1.

The permit shall have the appropriate level of authority endorsing the permit. Methods to be used and precautions to be taken shall be agreed to by parties beforehand and clearly stated on the work permit. All parties must sign off before any work commences.

Authorisation is evident by the signature which confirms that the required isolations have been made and precautions taken, except where these can only be taken during the Work.

3.1.4 Completion

Once the Work activity is complete, the permit receiver is required to return the permit to the permit issuer.

When the permit issuer is satisfied that Work has been completed to job specifications and safety requirements, they may sign off the permit.

On hand back of the work area the permit receiver should sign the permit stating that the work area is now ready to be returned to the issuer.

On the completion of work, and before the work area or plant is returned to service, a check shall be conducted to ensure:

- The Work has been completed;
- Any temporary arrangements/installation (e.g. temporary barricades, excavation holes) have been removed;
- All personnel and equipment are accounted for;
- The work permit has been cancelled or signed-off as being completed; and
- All related equipment and facilities and fire systems are operational and have been inspected and tested appropriately.

3.1.5 Cancellation

Where a permit has been written and is not required to be issued, or is not used for any other reason it is required to be marked as cancelled. The marking should include two diagonal lines across the page with the word ‘cancelled’ written in between.

If the nature of the Work changes or any other part of the permit becomes redundant or is no longer applicable, the permit must be cancelled and a new permit issued.

3.2 Roles and responsibilities

To ensure the permit to work system is effective, all individuals involved must clearly understand and take an active role in meeting their responsibilities. Due to the potential hazards associated with a permit to work, the specific responsibilities outlined below must be followed.

3.2.1 Managers and Supervisors

- Managers and supervisors must understand the Work for which a permit has been sought and understand isolation and tagging procedures.
- Ensure that a permit is granted before work commences.
- Ensure that the person(s) doing the Work is/are appropriately qualified to do the Work.
- Ensure that all checks are undertaken to ensure that the permit was used correctly.
- Ensure appropriate persons are informed when a job is completed or suspended and that the permit is cancelled.

3.2.2 Permit Issuer

- Ensure all hazards associated with the proposed job have been identified, assessed and controlled.
- Be familiar with the intended task(s).
- Ensure that the area and equipment are made safe before hand over.
- Outline how the Work is to be undertaken (e.g. procedures, precautions, equipment, location, start time, duration) - verbally and where necessary in writing.
- Maintain records of work permits.

3.2.3 Permit Receiver

- Satisfy themselves that they understand the requirements of the permit.
- Be skilled, qualified trained and competent to perform the Work, including the use of any personal protective equipment.
- All aspects on the permit must be completed and documented.
- Adhere to the permit to work requirements.
- Ensure the job is performed in a safe manner.
- Be aware of the hazards that could exist and have the necessary controls in place.
- Make equipment and area safe on completion of the task.
- Make the work area safe and seek immediate advice if a doubt or if circumstances or conditions change.
- Ensure that all tags and signs are prominently displayed so that personnel are aware that the equipment & etc. is isolated / not to be operated.

3.3 Hot Work

3.3.1 Prior to Work

Permit receiver to be provided with Hot Work permit form by permit issuer and to fill in Section B.

Permit issuer is to:

- Fill in Sections A & C and sign.
- Allocate permit number (Format is “Unit Designation”-“Consecutive Number” e.g. Z2-1. Each unit is responsible for their own consecutive numbers).
- Where a “fire system isolation” is required, this must be requested before 2pm on the previous day.

NB. A NEW PERMIT IS REQUIRED FOR EACH DAY OF WORK.

3.3.2 After completion

- Permit receiver must complete Section D and return form to permit issuer.
- Permit issuer must inspect site and complete Section E.
- Permit issuer to attach Permit to Job Sheet.
- Permit issuer to file permit.

Where Hot Work is to be conducted in laboratory areas, the Laboratory Manager is to be contacted and a Laboratory Clearance Certificate completed as well, including all details of Hot Work e.g. proximity to flammable goods cabinets.

3.4 Confined space

3.4.1 Prior to work

The permit receiver must produce their confined space ticket to the permit issuer.

The permit issuer should consult the UNSW confined space register to determine any individual hazards associated with the confined space.

Before a person enters a confined space, the following needs to be checked:

- the confined space contains an oxygen level of 21%;

- the concentration of flammable contaminant in the atmosphere is below 5 percent of its LEL; and
- the atmospheric contaminants in the confined space are reduced to below the relevant exposure standards.

Where the oxygen level is below 21% or atmospheric contaminants cannot be reduced below relevant exposure levels, entry may only occur with suitable PPE including supplied air.

Entry shall not occur to a confined space when flammable contaminants are greater than or equal to 5% LEL or where oxygen exceeds 23.5%.

3.4.2 Working in confined space

Where a concentration of flammable contaminant is found to be more than 5% and less than 10% of its LEL, all persons leave the Confined Space unless a continuous monitoring, suitably calibrated flammable contaminant detector is used in the Confined Space at all times while persons are present in it.

Where a concentration of flammable contaminant in the atmosphere of a Confined Space is found to be 10% of its LEL or more, all persons leave the Confined Space.

If Work stops for a period of more than 1 hour, a new gas test will be required.

If the Work needs to continue after the time specified on the permit to work, a new Space Entry Permit must be issued.

3.4.3 After completion

Permit issuer to obtain signed off Space Entry Permit and a record maintained.

3.5 HV substation entry

Due to the variety of HV substations at UNSW, there are three types of situations where a person may need to enter them:

1. A person who needs to undertake non HV work in a HV substation.
2. A licensed electrician who needs to undertake low voltage work in a HV substation.
3. A HV licensed electrician who needs to undertake HV work in a HV substation.

This Permit to Work Procedure applies only to HV work carried out by HV qualified electricians. All other work in HV substations can only be undertaken under the direct supervision of the UNSW FM Electrical Engineer.

Upon receiving a request from a HV qualified electrician, the UNSW FM Engineer will:

1. Review any documentation regarding the proposed Work.
2. Verify the qualifications of all persons who will be entering the HV substation.
3. Identify and include on the permit:
    a. Any particular hazards.
    b. Any conductors to be roped off and danger signs placed prior to the Work commencing.
    c. The areas in which the person/s is to carry out the Work.
    d. All other equipment in the HV substation especially the transformers, HV and LV switchboards.
    e. The trip mechanisms on the switchboards and explain in general terms what may cause an inadvertent trip.
    f. Actions required to prevent unauthorised access while Work is proceeding (to be included in SWMS).

g. Action to take in an emergency (to be included in SWMS).

h. Whether a safety observer is required.

4. Prepare and issue the permit to carry out the Work.
5. On completion obtain signed off HV Substation Entry Permit and file.

3.6 Maintenance work in Laboratory

3.6.1 Prior to work

The laboratory manager completes and signs the Laboratory Clearance Certificate indicating that the area is free of uncontrolled risks, the necessary HS information has been provided and the equipment and area has been cleaned and decontaminated.

3.6.2 Working in laboratory

The contractor then displays the completed certificate in the area where the Work is being conducted.

3.6.3 After completion

When the Work is completed the contractor signs the certificate and returns it to the laboratory manager.

For further information see Laboratory Clearance Certificate Guideline.

3.7 Working at Heights

3.7.1 Working at Heights Permit

In some cases a UNSW HS916 or equivalent Working at Heights Permit will need to be issued based on the nature of the Work being carried out. Situations where a permit may need to be issued include (but not limited to) the following:

Examples of situations requiring a permit	Examples of situations where a permit may not be required
• Work within 2m of an unprotected roof edge • Work within 2m of an unprotected edge where there is a risk of fall more than 2m (even with a safety net) • Where the use of a fall arrest or work position system is required • Use of boom type EWP (>11m with HR license) • Installation of edge protection • Testing of anchor points or other <2m from an unprotected edge	• Use of step ladder • Use of a ladder (<4m) • Where scaffolding is used (any height)

The permit receiver is to ensure that all the hazards have been identified, risks have been assessed and controls implemented. The permit receiver keeps a copy of the permit where the work is being conducted.

3.7.2 Work on UNSW roofs

Upon receiving a request from a contractor or UNSW staff (contact via x51111), the roof area manager will:

1. Request all job safety documents including height safety equipment certification, licenses and any other implement risk control measures;

2. For contractors – a copy of the following documents shall be provided to CFM/Project Managers/Supervisors where required:
    - Safe Work Procedure;
    - Safe Work Method Statement;
    - Job Safety Analysis (JSA); and
    - Emergency rescue plan (where there is use of a fall arrest system).
3. For UNSW staff, a copy of a written Risk Assessment/Safe Work Procedures shall be provided to CFM/Project Manager/Supervisors.
4. Area manager or authorised UNSW staff member will do an induction for inductee.
5. Working at Heights Permit will be issued where required (refer to HS916) by either UNSW FM or authorised UNSW staff members.

3.7.3 Working at heights (other)

There may be other situations where the heights permit is required (refer to HS707). In such cases, the necessary background documentation will still need to be collected.

3.8 Asbestos removal

UNSW has an Asbestos removal permit process. The HS918 Asbestos Work Permit must be completed whenever asbestos material is being removed and requires multiple sign off by the following (where applicable):

- UNSW job manager or principal contract for preventative maintenance
- Asbestos removal assessor
- Asbestos removals

Once the work has finished, completed permits must be handed back to UNSW and stamped as expired

3.8.1 After completion

When the Work is completed, the permit receiver signs the permit and returns it to the permit issuer.

4. Review & History

This procedure will be reviewed in accordance with the HSMS review procedure.

5. Acknowledgements

The University of Wollongong.

6. References

- AS/NZS 2865 - *Confined spaces*
- AS1940 - *The storage and handling of flammable and combustible liquids*
- AS1674 - *Safety in welding and allied processes*
- AS/NZS 2243 – *Safety In laboratories series*
- Code of Practise: *Managing Electrical Risks in the Workplace*
- *Code of practise: How to safely remove asbestos*

Appendix A: History

Version	Authorised by	Approval Date	Effective Date	Sections modified
1.0	Director, Human Resources	02/07/2010	02/07/2010	New Procedure
1.1	Director, Human Resources	29/04/2013	29/04/2013	Reviewed in accordance with WHS legislation.

				Updated Branding Logo in accordance with UNSW Branding Guidelines. Modified the document identifier from OHS to HS in accordance with WHS legislation review
1.2	Director, UNSW Safety and Sustainability	30 April 2014	30 April 2014	Reviewed for administrative updates
1.3	Director, UNSW Safety and Sustainability	3 March 2016	3 March 2016	Reviewed in accordance with WHS legislation