Permit to Work

1. Introduction

The Permit-to Work procedure provides a formal control system aimed at the prevention of accidents and damage to property where foreseeable hazardous work is carried out.

The Permit-to-Work consists of documents which:

- Details the work to be done.
- Details the precautions to take.
- Identifies all the foreseeable hazards.
- States the control measures to be implemented.
- Cancellation.
- List other permits in operation.

Permits themselves do not make a job free from risks, they rely upon effective control and co-ordination in order that hazards are identified and risks are suitably assessed.

The Health and Safety Executive identify the following requirements of a Permit-to-Work;

- Type of Permit – i.e. Hot Work, Asbestos etc.
- Unique Permit Number.
- Location of work.
- Details of the work to be carried out.
- Identification of hazards.
- Precautions required.
- Personal Protective Equipment required.
- Authorisation to commence work.
- Any extension of permit time.
- Handback
- Cancellation.

2. Conditions for a Permit

The University will expect Permits-to-Work to be issued in the following situations;

A Working in confined spaces.
B Work in laboratories.
C Hot Works
D High and Low voltage electrical work.
E Working with Asbestos
F Excavations.
G Work on roofs.
H Scaffold Towers.

Permits-to-Work will not be issued to contractors operating on the Campus within a secure and clearly identified site from which staff, students and non-authorised visitors are excluded and for which the Contractor is deemed to be entirely responsible.

3. Competent Persons

The use of Competent Persons is a prime requirement of the Permit-to-Work system. Although Competency has never been defined in either case or statute law, the Health and Safety at Work Regulations define a person as being Competent when that person;

“Has sufficient training and experience or knowledge as to enable him to assist in securing compliance, on the part of the employer, with the necessary safety legislation and maintenance procedures”.

The University of Kent expects those persons designated as Competent to have had:

- Valid certificated training, where this is deemed necessary, including an element of health and safety appreciation, relevant to the Permit to be issued.
- Experience of the work to be carried out.
- Knowledge of the Permit-to-Work procedures.

The number of Competent Persons available to issue and sign a Permit-to-Work will vary depending upon the type of permit required and if it is for contractors or Maintenance staff. Trade Supervisors and the Maintenance Services Manager will be defined a Competent Person, as will Building Surveyors and Building Services Engineers with the Design team, specifically for Contractors for which they are responsible.

Maintenance Staff

When maintenance staff need to carry out work that requires a permit, it will be issued and signed by the relevant trade Supervisor, or in his absence the Maintenance Services Manager.

If the work is in a laboratory or on a laboratory roof the Competent Person from that laboratory will countersign the permit. This will normally be the Laboratory Manager, or a named deputy.
Contractors
When contractors require a permit they should provide the relevant Estates Project Manager with a suitable and sufficient assessment of the risks inherent with the work and a method statement for the works to be undertaken. This information should, whenever possible, be submitted at least 48hrs before the start of the work and will allow the Competent Person sufficient time to assess the work in detail. For work involving Maintenance Service contractors, Method Statements shall be provided for specific tasks at the beginning of the contract and if necessary Permits-to-Work issued as and when required.

4. Issuing a Permit-to-Work

The following procedure should be followed when issuing a Permit-to-Work;

4.1. A permit should be obtained from the Maintenance Help Desk and its number logged. This permit will be uniquely numbered.

4.2 The Competent Person should ensure that no other permits have been issued that will have an impact on the one required.

4.3 The permit to be completed correctly with all the relevant information regarding the work to be carried out, including the exact location and the nature of the work.

4.4 All the copies of the permit should be signed by the relevant Competent Persons, and if necessary the Contractors representatives and that contractors and staff understand the implications of the conditions listed on the permit.

4.5 The correct copy of the permit is to be displayed prominently at the work.

4.6 The precise time limits for which the permit is valid are to be indicated and observed at all times.

4.7 If issued for a contractor, that the company name is to be included.

4.8 If issued for a contractor, the contractor’s supervisor is to be identified.

5. Monitoring the Work
As far as is reasonably practicable, the Competent Person shall be responsible for monitoring the work at regular intervals, to ensure that the operatives are adhering to the conditions of the permit.
6 Completed Work

When the work has been completed the Competent Person will inspect the site to ensure that:

6.1 The works have ceased.
6.2 All tools and equipment have been removed
6.3 The work area has been left in a satisfactory and safe condition. When the Competent Person is satisfied that these conditions have been met the permit will be cancelled and copies filed with the contract documents (if appropriate) and in the Permit file. These permits should be kept for 12months.

7 Out of Working Hours

Whenever possible, work that requires a Permit-to-Work should be carried out only during normal working hours. However, there will be occasions when this is not possible and the Competent Person must ensure that he is available to monitor contractor or staff compliance throughout the duration of the permit irrespective of when it takes place.
A. PERMIT TO WORK (CONFINED SPACES)

All work within a confined space shall be subject to a Permit to Work. A confined space at the University of Kent has been identified as;

1. Storage tanks
   a) Oil tanks – Brotherhood Boilerhouse.
   b) Water tanks – any tank where total access is possible.

2. Maserators
   a) East Oast
   b) Parkwood Road.

3. Manholes
   a) Any manhole where total access is possible.

4. Boilers
   a) Brotherhood Boiler House

5. Lift pits
   a) Any lift where total access is possible.

6. HPHW ducts
   a) All external ducts.

7. Service ducting
   b) Roof ducts – Rutherford College.

8. Ventilation ducting
   a) All ducting where total access is possible, excluding fresh air intakes.

No person working for the University, either staff directly employed or contractors shall enter, or be instructed to enter, a confined space for any purpose;

(i) Until they have received a valid permit-to-work.
(ii) Unless it is not reasonably practicable to undertake the necessary work without such entry.

The duration of the Permit-to-work will be no longer than a maximum of one day.
Requirements to be met to enable work to commence;

<table>
<thead>
<tr>
<th>1 a) Oil tanks.</th>
<th>1 b) Water tanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Details of PPE</td>
<td>- Details of PPE</td>
</tr>
<tr>
<td>- Method statement of work to be carried out.</td>
<td>- Lock-off all inlet/outlet valves.</td>
</tr>
<tr>
<td>- Monitoring of the atmosphere.</td>
<td>- Method statement of work to be carried out.</td>
</tr>
<tr>
<td>- Observer outside with means of communication.</td>
<td>- Observer outside with means of communication.</td>
</tr>
<tr>
<td>- Rescue harness</td>
<td>- Rescue harness</td>
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<thead>
<tr>
<th>2 Masserators</th>
<th>3 Manholes</th>
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<tbody>
<tr>
<td>- Details of PPE</td>
<td>- Details of PPE</td>
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<tr>
<td>- Method statement of work to be carried out.</td>
<td>- Method statement of work to be carried out.</td>
</tr>
<tr>
<td>- Monitor the atmosphere.</td>
<td>- Observer outside with means of communication.</td>
</tr>
<tr>
<td>- Observer outside with means of communication.</td>
<td>- Rescue apparatus.</td>
</tr>
<tr>
<td>- Rescue harness</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>4 Boilers</th>
<th>5 Lift Pits</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Authorised staff only.</td>
<td>- Authorised staff only</td>
</tr>
<tr>
<td>- Details of PPE</td>
<td>- Details of PPE</td>
</tr>
<tr>
<td>- Method statement of work to be carried out</td>
<td>- Lift Props to be used.</td>
</tr>
<tr>
<td>- Observer outside with means of communication</td>
<td>- Lift to be electrically isolated</td>
</tr>
<tr>
<td>- Rescue harness</td>
<td>- Method statement of work to be carried out.</td>
</tr>
<tr>
<td></td>
<td>- Observer outside with means of communication</td>
</tr>
</tbody>
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<thead>
<tr>
<th>6 HPHW Ducts</th>
<th>7 Service Ducts</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Authorised staff only</td>
<td>- Details of PPE</td>
</tr>
<tr>
<td>- Details of PPE</td>
<td>- Not to be entered if “live” HPHW pipework in duct.</td>
</tr>
<tr>
<td>- Lift manhole covers either side of manhole to be entered</td>
<td>- Observer outside with means of communication</td>
</tr>
<tr>
<td>- Lock-off all valves</td>
<td>- Observer outside with means of communication</td>
</tr>
<tr>
<td>- Only to be entered with HPHW isolated and in a cold state</td>
<td></td>
</tr>
<tr>
<td>- Rescue harness</td>
<td></td>
</tr>
<tr>
<td>- Two observers outside with means of communication (one of which should be Chargehand or other Manager)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8 Ventilation ducting.</th>
<th></th>
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<tbody>
<tr>
<td>- Details of PPE</td>
<td></td>
</tr>
<tr>
<td>- Method statement of work to be carried out</td>
<td></td>
</tr>
<tr>
<td>- Observer outside with means of communication</td>
<td></td>
</tr>
<tr>
<td>- Vent plant to be electrically isolated.</td>
<td></td>
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</tbody>
</table>
Prior to raising a Permit-to-Work for a contractor, the Competent Person shall:

- Ensure that the contractors staff understand the fire procedures for where they are working.
- Ensure that any other related permit has been issued.
B PERMIT TO WORK (LABORATORIES)

All work within the Chemistry, Physics and Biosciences laboratories shall be subject to a Permit-to-Work.

Maintenance Staff

Before any work is carried out in a laboratory a general access permit should be issued, which should be signed by the Competent Person from that laboratory. This does not apply to circulation areas, lecture theatres, general office accommodation, toilets, plantrooms. For specific work on fumecupboards or waste water systems the permit for this work should take priority.

Contractors

When contractors require a permit they should provide the relevant Estates Project Manager or Maintenance Services Manager with a suitable and sufficient assessment of the risks inherent with the work and a method statement for the works to be undertaken. This information should, whenever possible, be submitted at least 48hrs before the start of the work and will allow the Competent Person sufficient time to assess the work in detail.

A general access Permit-to-Work should be issued for all minor repairs within laboratories; i.e. replacing lamps, general building maintenance, window cleaning, etc.

Fumecupboards

For work on fumecupboards, including the extract ductwork, the following requirements should be met before the commencement of work:

- Determine from the laboratory Competent Person the type of work carried out in the fumecupboard and if it requires a thorough internal clean before work can commence.
- Is the fumecupboard a single unit or is it connected via the extract ducting to other working fumecupboards.
- PPE to be used.

The duration of the permit shall be for no more than a maximum of one day.

Waste water systems
For work on waste water systems throughout all laboratories up to the first external manhole to the building, the Competent Person for the laboratory should sign the Permit-to-Work.

The following requirements should be met before the commencement of work;

- Determine from the Competent Person if the waste water is contaminated.
- PPE to be used.
- All waste outlets “upstream” of the repair are sealed and are taken out of use.
- The duration of the permit shall be for no more than a maximum of one day.
C. PERMIT TO WORK (HOT WORKS)

Hot Work is defined as work that involves temperatures that could give rise to risks of fire and ignition of flammable substances and combustible materials, and includes work where there is a naked flame or generation of sparks, smoke or fumes.

The following works shall be subject to a Permit-to-Work system on the University campus:

- Brazing and soldering
- Bitumen boilers
- Electric arc welding
- Gas welding or cutting
- Hot air welding
- Disk cutting in confined spaces where there is a risk of fire or explosion.

The duration of the Permit-to-work will be no longer than a maximum of one day, subject to the one exception below.

- All work must cease at least 1 hour before the end of the working day and the permits are location specific.
- Where work lasts for more than one day i.e. re-roofing with a bitumen boiler, the Competent Person signing on behalf of the Estates Department may issue a permit covering 5 consecutive working days.
- The Permit-to-Work shall not apply to hot work in the fitters workshop at the Maintenance Centre.

Before the permit is signed, the Competent Person shall inspect the working area for the following control measures:

- Area is adequately ventilated
- Gas cylinders are secured in a vertical position on a trolley.
- Floors are clean and free from combustible materials.
- All floor and wall openings are covered.

When Hot Work occurs in a confined space

- A Permit-to-Work (Confined Space) has been issued.

When Hot Work occurs on a roof
Gas cylinders are sited at least 3 metres from burner.
Heat insulated base is provided.
A Permit-to-Work (Roofs) has been issued.

Fire Control

The Competent Person shall ensure that the following general controls are in place;

- Suitable and sufficient fire extinguishers are in place.
- Staff carrying out the work are trained in their use.
- Adjacent smoke heads are covered to prevent false alarms, and uncovered when work has finished.
- All fire doors are closed.
- Arrangements are in place to ensure that hot work is not left unattended during tea/lunch breaks.
- Staff carrying out the work are aware of the emergency telephone numbers.
- Arrangements are in place to carry out a check of the area at least 1 hour before the cessation of work each day.
- That contractors staff are fully aware of the fire procedures for the area in which they are working.
D. PERMIT TO WORK 2 (ELECTRICAL SYSTEMS)

High Voltage

The Permit-to-Work system for High Voltage applies to contractors and Estates staff who may have need to enter any High Voltage substations. It DOES NOT allow for switching of the H.V. circuits or for maintenance of the equipment, this can only be carried out by authorised SEEBOARD staff.

The duration of the Permit-to-Work will be no longer than a maximum of one day. For work that may take longer than the one day, a separate permit should be issued for each day.

Requirements to be met to enable access to the substation;

- The Competent Person must ensure that access to the substation will not in anyway effect the H.V. switchgear or controls.
- The Competent Person must stay at the substation if access is required for 1 hour or less. For periods of more than 1 hour the Competent Person must be available on the campus and be within immediate communication with those in the substation.
- Only those staff named on the Permit-to-Work will be allowed in the substation.
- The substation must not be left unlocked and unattended.

Low Voltage

Low voltage is regarded as a voltage exceeding 50v AC or 120v DC between conductors or earth, but not exceeding 1000v AC or 1500v DC between conductors or 600v AC or 900v DC between any conductor and earth.

Requirements to be met when working on low voltage electrical installations;

- The Competent Person must ensure that before disconnection or isolation of any distribution board or circuit that feeds a distribution board, the electrical equipment effected has been identified and if appropriate the users notified.
- That staff and contractors are aware of the need to lock-off all isolation switches in the OFF position.

The Competent Person should issue a Permit-to-Work when any of the following work is carried out on low voltage electrical installations;
UNIVERSITY OF KENT
ESTATES DEPARTMENT

- Switching off any switch fuse, distribution board, or mains circuit board that may affect the University’s IT systems, the safety of any person, or the electrical supply to fire alarm systems.
- Work on remote and automatically controlled low voltage switchgear.

The duration of the Permit-to-Work will be issued for a maximum of 5 working days and should be location specific.
E. PERMIT TO WORK (ASBESTOS)

All work with asbestos materials shall be carried out in accordance with the requirements of current legislation, in particular:

- The Control of Asbestos at Work Regulations 1987 and Approved Codes of Practice
- The Asbestos (Licensing) Regulations 1983
- Approved Code of Practice: Working with Asbestos Insulation, Asbestos Coating and Asbestos Insulation Board.

All work involved with the removal of asbestos materials will be undertaken by licensed asbestos removal contractors, but some University Estates staff will come into contact with product containing asbestos during their normal working practices.

Competent Person Duties

Before a permit is raised the Competent Person shall:

1. Confirm that the material to be removed/worked with has an asbestos content by referring to the Asbestos Register. If the area is not listed in the Register but the Competent Person has a suspicion that the material may contain asbestos, it should be analysed before the permit is issued.

2. If the analysis of the material confirms that asbestos is present the Asbestos Register should be updated.

3. Determine if the work can be undertaken by Estates staff or if a licensed contractor should be involved.

4. If the work involves a contractor, ensure that they provide a detailed Safety Plan for the operations to include:
   - Scope of work
   - Programme of work
   - Proposed method of removal
   - Waste disposal
   - PPE for operatives
   - Air monitoring procedures
   - Accident emergency procedures
   - Probable duration of work.
   - Location of decontamination unit.
5. If the work involves University staff

- Ensure that the correct PPE is available and is in good condition
- Ensure that the staff understand the extent of the work required.
- Ensure that the appropriate type ‘H’ vacuum cleaner is available.

**Inspection before Work Commences**

The Competent Person should inspect the works to ensure that the control measures are in place and invite a Union, or Staff Representative to be present, if considered to be necessary.

**Completion of Work**

Before the enclosures are dismantled the contractor must arrange for Assurance Monitoring within the enclosure, undertaken by a University approved Laboratory. Usually the order to the Laboratory will be raised by the University, with responsibility for arranging the time and place for the test left with the contractor to organise.

The laboratory must be satisfied that the asbestos fibre count is within acceptable limits (0.01 fibres/ml).
F. PERMIT TO WORK (EXCAVATIONS)

Introduction.

All excavation work, piling etc on the University campus shall be subject to a Permit-to-Work (Excavations). Excavations to a depth of 1 metre can be carried out by University staff, any excavation to a greater depth must be carried out by a contractor with the relevant experience.

Permit Duration.

Permits-to-Work (Excavations) may be issued for a maximum of 5 working days and are specific to a location.

Issuing of Permit.

Before the permit is issued the Competent Person shall ensure that:

- Contractors and Maintenance staff have sufficient information regarding known cable runs, pipework and any other underground services.
- Contractors and Maintenance staff have sufficient knowledge of ground conditions and the stability of surrounding building.
- Contractors provide a Method Statement for the work which should include:
  - Confirmation that the Contractor has visited the site and understands the extent of the excavations.
  - Details of PPE.
  - Method of excavation.
  - Duration of works.
  - Details of any precautions that may be necessary to prevent collapse of the trench.
  - Details of fencing around the excavation.
  - Reinstatement of excavation.

Following the issuing of the permit, the Competent Person shall ensure that the work is adequately supervised for its duration.
G  PERMIT TO WORK (ROOFS)

This Permit-to-Work is intended for Maintenance staff and Contractors who have a need to work on roofs at the University, it will act as a means of providing information and instruction regarding the risks and hazards associated with the area.

This permit will be necessary to access the following University roofs:

- Chemistry Phase 1
- Chemistry Phase 2
- Chemistry Teaching Block
- Biosciences
- Physics
- Sports Hall
- Keynes College
- Keynes College Extension.
- Registry
- George Allen
- Single storey portable buildings

Requirements to be met before work can start:

<table>
<thead>
<tr>
<th>1 Chemistry Phase 1.</th>
<th>2 Chemistry Phase 2</th>
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</thead>
<tbody>
<tr>
<td>Permit signed by Competent Person in Chemistry.</td>
<td>Permit signed by Competent Person in Chemistry.</td>
</tr>
<tr>
<td>Other permits required.</td>
<td>Other permits required</td>
</tr>
<tr>
<td>Details of PPE</td>
<td>Details of PPE</td>
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</tbody>
</table>

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<thead>
<tr>
<th>3 Chemistry Teaching Block.</th>
<th>4 Biosciences</th>
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</thead>
<tbody>
<tr>
<td>Permit signed by Competent Person in Chemistry.</td>
<td>Permit signed by Competent Person in Chemistry.</td>
</tr>
<tr>
<td>Other permits required</td>
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<tr>
<td>Details of PPE</td>
<td>Details of PPE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5 Physical Science Building</th>
<th>6 Keynes College.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit signed by Competent Person in PSB</td>
<td>Two persons necessary.</td>
</tr>
<tr>
<td>Other permits required.</td>
<td>Details of PPE</td>
</tr>
<tr>
<td>Details of PPE.</td>
<td>There is no lanyard man safe system or edge protection, do not work within 2 metres of roof edge.</td>
</tr>
<tr>
<td></td>
<td>No access allowed in high winds or rain.</td>
</tr>
<tr>
<td></td>
<td>Other permits required</td>
</tr>
</tbody>
</table>
**Details of PPE**
- No access allowed in high winds or rain.
- If working within 2 metres of roof edge 2 persons necessary.
- Persons working within 2 metres of roof edge must use lanyard man safe system.
- Only staff trained in the use of the lanyard man safe system will be allowed to use the equipment.
- Contractors must use their own safety harness to attach to the lanyard man safe system.
- Other permits required

**Contractors must use their own safety harness to attach to the lanyard man safe system.**

**Other permits required**

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**9 Registry**
- Details of PPE
- No access allowed in high winds or rain.
- If working within 2 metres of roof edge 2 persons necessary.
- Person working within 2 metres of roof edge must use lanyard man safe system.
- Only staff trained in the use of the lanyard man safe system will be allowed to use the equipment.
- Contractors must use their own safety harness to attach to the lanyard man safe system.
- Other permits required

**10 George Allen**
- Details of PPE
- No access allowed in high winds or rain.
- If working within 2 metres of roof edge 2 persons necessary.
- Persons working within 2 metres of roof edge must use lanyard man safe system.
- Only staff trained in the use of the lanyard man safe system will be allowed to use the equipment.
- Contractors must use their own safety harness to attach to the lanyard man safe system.
- Other permits required

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**11 Single storey portable buildings.**
- Do not work within 1 metre of edge.
- No access allowed in high winds or rain.
- Other permits required

The duration of the permit shall be **for a maximum of 1 working day.**
H PERMIT TO WORK (TOWER SCAFFOLD)

The erection of all tower scaffolds shall be subject to a Permit to Work.

Maintenance Staff

The erection of a tower scaffold for maintenance staff shall only be carried out by staff who have received training and have been cleared as Competent Person for that task.

Competent Person Duties

The University Competent Person should ensure that:

- The tower scaffold is inspected regularly by the University Insurance Inspector.
- All parts of the tower are in good and serviceable condition.
- They have full knowledge of the work to be carried out from the scaffold.
- It is inspected at the beginning of each new day it is in use.

Permit Duration

Permits-to-Work (tower scaffold) may be issued for a maximum of 3 working days.

AUGUST 2002