



Management of Permits-to-Work

Standard

PRSG15.1v3		WELLBEING, SAFETY AND HEALTH MANAGEMENT SYSTEM					
Author:	HSS	Approved by:	GT	Version number:	3	Issue Date:	July 2015

Introduction

On property managed by the University there are a small number of work activities (identified below) which will be managed by a permit-to-work system, **and are the only activities for which permits-to-work can be used**. The University has undertaken an assessment of risk; this has identified that the types of work activities below may pose a risk that needs to be controlled by using a permit-to-work.

Permits-to-work form an essential part of safe systems of work for these tasks/works (usually maintenance based). They allow work to start only after safe procedures have been defined and they provide a clear record that all foreseeable hazards have been controlled. Permits-to-work do not, in themselves, make a job free from risk; they rely upon effective use of controls and coordination of activities in order that hazards are identified and risks are suitably and sufficiently assessed. As the vast majority of these activities are carried out by FD Estates, they will manage the permit-to-work system and Procedure.

What do we mean by Permits-to-work?

A Permit-to-work is a written record that authorises specific work, at a specific location on property managed by the University, for a specific period of time; it is an agreement between the Permit Issuer and the Permit Receiver, which documents the conditions, preparations, precautions, limitations and ongoing control measures that need to be followed before work can start.

Which work activities require a permit-to-work?

A permit must be issued if any of the following activities are carried out on property managed by the University:

- **Work on industrial gas systems** – 'Industrial gas system' describes the provision of gas (e.g. North Sea gas to heat buildings/ water or ovens for cooking).
 - This **does not** include emergency works undertaken by an approved contractor in order to avert, or remedy, a major incident. Emergency work is covered by the critical incident plan/ emergency plan.
- **Excavations (digging a hole on property managed by the University)** – digging into the ground at a depth greater than 50mm (2") below surfaces where underground services may be found.
 - This includes: trenching, excavation as part of construction work, digging, preparation of new shrub beds, and installation of fence posts.
 - This **does not** include: routine maintenance of existing shrub beds where digging is less than spade depth (300mm or 12"), or regular maintenance in a space where up-to-date utility drawings are available (e.g. the grassed area outside LUU where service utilities are clearly marked). Contact FD Estates Helpdesk for more information (ext 35555). It also **does not** include faculty-managed teaching or research (as these will be covered by the usual activity risk assessment).
- **Hot works** – work involving temperatures that could give rise to fire or ignition of flammable substances and combustible materials.
 - This includes work that uses or creates naked flames, sparks, smoke or fumes, e.g. brazing and soldering; bitumen boilers; electric arc welding; gas welding or cutting; hot air welding; disk cutting in confined spaces and areas where there is a high risk of fire or explosion.
 - It **does not** include faculty-managed teaching or research experiments or faculty/service-managed routine work in a workshop (as these will be covered by the usual activity risk assessment), or work which is carried out outside and located away from buildings and combustible/flammable materials so that there is no longer a fire risk.
- **Work on pressurised/steam systems (including steam distribution and compressed air systems)** – 'pressurised/ steam system' means any system comprising one or more pressure vessels of rigid construction, any associated pipe work and protective devices (e.g. pressure relief valve) which may (or already does) contain steam or any fluid that would have a vapour pressure greater than 0.5 bar above atmospheric pressure when in equilibrium with its vapour at either the actual temperature of the liquid or 17.5 degrees Celsius.
 - This **does not** include transportable pressure containers (e.g. compressed gas cylinder) or faculty-managed teaching or research experiments or faculty/service-managed routine work in a workshop

which would be covered by the usual activity risk assessment (e.g. autoclaves would not be included unless they were operated directly from an in-house steam system). It also **does not** include emergency works undertaken by an approved contractor in order to avert, or remedy, a major incident, emergency works is covered by the critical incident plan/ emergency plan.

- **Work on high (anything above 240V) and low (230/240V – normal mains) voltage systems**
 - This includes: Switching off any isolator, switch fuse, distribution board, or mains circuit board that may affect people's safety (e.g. by switching off a fume cupboard system without telling the users); Switching off any isolator, switch fuse, distribution board, or mains circuit board that may affect the University's information technology systems; test on live electrical apparatus; test on electrical distribution systems that need the installed safety systems/barriers defeated or removed; work on electrical distribution systems that expose personnel to shock hazards; work on remote and automatically controlled low voltage switch-gear; isolation of electrical equipment to make it safe unless carried out by a competent person holding a valid Authorisation Certificate; test on any earthing system whilst the supply is still live.
 - This **does not** include emergency works undertaken by an approved contractor in order to avert, or remedy, a major incident, emergency works is covered by the critical incident plan/ emergency plan. Or faculty-managed teaching or research experiments or faculty/service managed routine work in a workshop (as this is covered by the usual activity risk assessment).

The following elements are NOT included the permit-to-work system:

- **Asbestos** - as this is covered in a particularly rigid and specific Standard. Please see the protocol on 'Management of asbestos-containing materials' at www.leeds.ac.uk/safety for more information..
- Work on **medical gas pipeline systems** – this requires a permit-to-work but is covered by Department of Health Guidance (*Health Technical Memorandum 02-01: Medical gas pipeline systems*). contact Leeds NHS trust Estates Department via 0113 243 3144 for details of their system.
- **Certain types of work in a confined space** – this is work in any place (including chambers, tanks, vats, silos, pits, trenches, pipes, sewers, flues, wells or other similar space) which, because of its enclosed nature, brings a reasonably foreseeable chance of harm from the following 'specified risks': serious injury arising from a fire or explosion; loss of consciousness because of an increase in body temperature or asphyxiation from gas, fume, vapour or lack of oxygen; drowning because of an increase in the level of a liquid; or asphyxiation by a free-flowing solid (e.g. sand, grain or earth) or being unable to reach a breathable environment due to being trapped by the free-flowing solid. If you are doing this type of work then speak to your Health and Safety Manager.
- **Access to higher risk areas** (e.g. roofs, plant rooms or laboratories) are covered in a separate protocol. This is currently being written so in the meantime please speak to your Health and Safety Manager or Estates Helpdesk (x35555) if you need help.
- There are also **exclusions for similar kinds of faculty-managed teaching or research activity** (see the definitions above) as these are managed locally through the risk assessment processes

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The University takes a management approach to the adequate control of the risks based on the need for legal compliance, and expects that:

- The permit-to-work system is used on property managed by the University.
- The permit-to-work system is managed by Facilities Directorate (FD) Estates on behalf of the University. Any variation on this is formally approved by FD Estates.
- Only contractors from the Health and Safety Approved Contractor Registers (FD or central) or staff authorised by FD Estates can be used for work requiring a permit-to-work.
- For the following work activities (defined in detail above) the permit-to-work Procedure attached to this protocol is followed before work begins:
 - **Work on industrial gas systems**
 - **Excavations** (permit-to-dig)
 - **Hot works**

- **Works on pressurised/steam systems** (including steam distribution and compressed air systems)
- **Work on high and low voltage systems.**
- Permits-to-work are not issued for any other activity without the express approval of FD Estates.
- A risk assessment for the above work activities is in place.
- People are formally appointed to carry out the role of Permit Issuers and Authorising Engineers.
- Only Authorising Engineers can approve Permit Issuers.
- Permits-to-work are issued by people (Permit Issuers, also known as Authorising Persons in FD Estates) who are trained, formally authorised and monitored by FD Estates.
- Permit Issuers, Authorising Engineers and Permit Receivers are trained in accordance with the Permit-to-work training matrix attached to this protocol and this is recorded.
- A permits-to-work (paper or electronic) contains at least the following elements:
 - Permit title, unique permit number, work location; plant identification (if applicable to the work); description of work to be done and any limitations; reference to other relevant permits or isolation certificates, hazard identification; protective equipment required; authorisation; date and time duration of permit; acceptance; hand-back; cancellation.
 - All necessary controls and precautions along with the person who will carry out each precaution.
- A system to keep track of all issued (i.e. live) permits-to-work is in place.
- The Permit Issuer checks if other permits-to-work or authorisation-to-access have been issued which may interfere with the permit they are issuing, and identifies safe systems of work if this is the case.
- The permit-to-work is issued on the same day as the day the work will happen.
- A copy of the permit-to-work is available at the work location while the work is being carried out.
- On the day, the Permit Issuer visits the work location to examine the site and check all precautions specified have been taken, before authorising a permit-to-work so that the work can commence.
- The permit-to-work does not exceed 8 hours unless a formal extension is agreed by the Permit Issuer following a return visit to the site to check that controls are still valid.
- A new permit-to-work is issued if the Permit Issuer or Permit Receiver(s) involved with the work change.
- The permit-to-work is reviewed immediately if: conditions, scope of work or if circumstances change, to determine if the precautions are still adequate. If the precautions are insufficient, work is suspended, the permit-to-work is cancelled and a new permit-to-work is issued.
- If a new permit-to-work cannot be issued then the work is suspended, the permit-to-work is cancelled and this is noted on the permit.
- Following completion of the work the permit-to-work is formally handed back and cancelled.
- Where work has not been completed within the permit-to-work duration, a decision is made and either an approved extension is given, or the permit-to-work is handed back, the non-completion is noted and the permit-to-work cancelled.
- Before cancelling a permit-to-work the Permit Issuer visits the location where the work has been carried out to check that it has been handed back in a safe condition.
- A record of each permit is kept for a minimum of 3 years.

Relevant Legislation

- **Confined Spaces Regulations 1997**
 - Regulations 4 & 5; Work in confined spaces and emergency arrangements.
- **Electricity at Work Regulations 1989**
 - Regulation 4(3); General requirement for safe working systems, work activities and protective equipment.
 - Regulation 13; Precautions for work on equipment made dead. Advice on written procedures is given in *Memorandum of guidance on the Electricity at Work Regulations 1989. Guidance on Regulations HSR25.*
- **Pressure Systems Safety Regulations 2000**
 - Regulation 8 & 9; Written scheme of examination: measures necessary to prepare the pressure system for safe examination and examination in accordance with the written scheme.