

Work Equipment Procedure

Document Control

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	Reviewed	on Web Site	Review	
0.1	March 2016	April 2016	March 2017	 Conversion from Policy to Procedure Checked for legal compliance Minor changes to update terminology or to reflect current practices
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Work Equipment Procedure

1 Introduction

This procedure forms part of the University's Health and Safety Management System and should be considered in relation to the University's Safety, Health and Wellbeing Policy to ensure that the risks associated with work equipment are appropriately assessed and managed.

This procedure applies to all relevant Schools and Departments within the University. The aim of the procedure is to outline the health and safety requirements for work equipment to assist managers and staff in complying with the requirements of the Provision and Use of Work Equipment Regulations 1998.

2 Accountabilities

A key role in implementing this procedure lies with the Executive members and all managers who must ensure all of the following requirements are addressed and implemented within their area of responsibility and control. In certain circumstances, the advice and assistance of specialist advisors will be required.

3 Procedure

Work Equipment

The scope of 'work equipment' is extremely wide. It covers almost any equipment used at work, including:

- (a) Hand tools such as hammers, knives, handsaws, meat cleavers etc;
- (b) Single machines such as drilling machines, circular saws, photocopiers, dumper trucks, etc:
- (c) Apparatus such as laboratory apparatus (Bunsen burners, instruments etc);
- (d) Lifting equipment such as hoists, lift trucks, elevating work platforms, lifting slings, etc which must also meet the requirements of the Lifting Operations and Lifting Equipment (LOLER) Regulations 1998;
- (e) Other equipment such as ladders, pressure water cleaners etc;
- (f) An installation such as a series of machines connected together.

NB: This list is not exhaustive.

Suitability of Work Equipment

Work equipment must be assessed (preferably prior to purchase) for its suitability and as such, a risk assessment must be undertaken.

The risk assessment which is required by Regulation 3(1) of the Management of Health and Safety at Work Regulations 1999 (as amended) is the assessment which should examine the

suitability of work equipment and highlight the need for integrating health and safety considerations into the purchasing procedure.

The University general risk assessment template should be used when carrying out work equipment assessments. To help inform the risk assessment, you may wish to use the work equipment checklist which can be found on the work equipment section of the Health and Safety webpage.

An assessment of the suitability of work equipment should include three related aspects:

- a) It's **initial integrity** (i.e. it must be safe for use in terms of its construction or adaptation).
- b) The **place** where it will be used (e.g. electrical equipment is not normally suitable for wet or flammable atmospheres unless it is designed for that purpose).
- c) The purpose for which it will be used (e.g. a screwdriver should not be used as a chisel).

The equipment must conform to European Community Requirements (CE markings, certificates etc.).

Schools, Directorates and Professional Support Departments must ensure that the Work Equipment is suitable for its designed use of operation and the conditions in which it is used.

Work equipment must not be used by any unauthorised operators or by operators for whom it is unsuitable, if there is an associated hazard with the use of specific equipment. Control systems must therefore be devised and implemented to prevent unauthorised access, for example, locks with identified key holders only. (As part of the risk assessment, you may wish to use the checklist in Appendix 3).

Where possible this should always be done **before purchase** so that health and safety risks are eliminated at source.

Specific dangers must be protected against e.g. missiles being ejected, fire, electric shock etc and equipment that carries specific risks must be marked. Mobile work equipment may need service procedures to control risks.

Maintenance

Equipment must be maintained and a record of up-to-date maintenance details recorded.

Schools, Directorates and Professional Support Departments must maintain work equipment in an efficient state (general safe working of the equipment), in efficient working order, (everything works as it should) and in good repair (repairs and maintenance have been undertaken to the correct standard.

The frequency of maintenance activities will depend on several factors including:

- o intensity of use frequency and maximum working limits.
- o the environment in which it is used outdoors or indoors?
- the variety of operations is equipment performing the same task continuously or does this change?

o risks to health and safety from malfunction or failure.

Complex powered equipment will normally be accompanied by a manufacturer's maintenance manual that specifies routine and special maintenance procedures to be carried out at particular intervals. This will include procedures required for health and safety reasons and the instructions must be followed.

If plant and equipment is hired, clear responsibilities for maintenance and inspections must be documented. The Hire Company is to carry out these, and the service department must still ensure that they have been carried out and also hold copies of all records.

A record of maintenance must be kept for high-risk equipment. If you have a maintenance log with a piece of equipment, you must keep it up to date.

Where the maintenance work might involve a risk, provision should be made at the design stage so that maintenance work can be carried out with the equipment stopped. Sometimes this is not possible, in which case further safeguards should be introduced, for example:

- a) providing temporary guards;
- b) limited movement controls;
- c) crawl speed operated by hold-to-run controls;
- d) using a second low-powered visible laser beam to align a powerful invisible one.

Inspection

Inspection is not the same as maintenance as both have a different function. The purpose of an inspection is to identify whether the equipment can be operated, adjusted and maintained safely and that any deterioration (such as defect, damage or wear and tear) can be detected and remedied before it results in a partial or complete failure thus creating additional risks.

Inspection and supervision must be undertaken by a competent person, is a person with the necessary knowledge and experience, who can determine the nature of the inspection.

A suitable inspection must be carried out where the risk assessment (carried out under regulation 3(1) of the Management Regulations) has identified a significant risk to the operator or other workers from the installation, maintenance, decommissioning or use of the work equipment.

Equipment that may need to be inspected includes:

- o machines where there is a need to approach the danger zone during normal operations;
- o complex automated equipment;
- o integrated production lines.

Where work equipment is of a type where the safe operation is critically dependent on it being properly installed (or re-installed in a new location), Departments must arrange for a suitable inspection to be carried out before it is used.

All inspections <u>must</u> be recorded and kept until the next inspection.

All Schools, Directorates and Professional Support Departments must ensure that no work equipment (identified as requiring a suitable inspection) leaves the University (for example, sold, hired, loaned, recycled etc) to another organisation or, (if obtained from another organisation) be used by the University, unless it is accompanied by physical evidence that the last inspection required has been carried out. Such physical evidence may be a copy of the inspection record, in the case of large items, or may be tagging, labelling etc. for smaller items.

Information and Instruction

Under PUWER 98, Schools, Directorates and Professional Support Departments must make available all relevant safety information and, where appropriate, written instructions on the use of work equipment to their staff. This information must be provided to maintenance workers and supervisors as well as staff that operate the equipment. Staff must have easy access to such information and instructions as well as be able to understand and use them.

Instructions can be from suppliers, in-house documents or from training courses, may be verbal or written and may be in a range of formats such as instruction sheets, warning labels, training manuals and risk assessments. The form that instruction takes therefore depends on the complexity of the equipment.

Information and instructions must cover: -

- o health and safety aspects arising out of the use of work equipment
- o any limitations on these uses
- o any foreseeable difficulties that could arise and the methods to deal with them
- any important safety considerations that have been learned from experience

Training

All Schools, Directorates and Professional Support Departments must provide training for reasons of health and safety particularly on safe methods of use. Such training must be provided to supervisors and managers as well as staff that operate work equipment.

Training is necessary on recruitment, when new technology or equipment is introduced, the system of work changes and also as a refresher.

The nature of the training will depend on the job, the equipment and the experience of the member of staff with the key aim to achieve competency. For example,

- Particular care must be taken in the training and supervision of young people, taking into account lack of experience, lack of awareness and immaturity
- Self-propelled work equipment must only be driven by appropriately trained competent drivers
- Chainsaw operators must not work on a tree unless they hold a certificate of competence or national competence award relevant to the work they undertake

Conformity with Community Requirements

All Schools, Directorates and Professional Support Departments must ensure that equipment provided for use for the first time since 31st December 1992 complies with the Supply of Machinery (Safety) Regulations 2008, as amended by the Supply of Machinery (Safety) (Amendment) Regulations 2011.

In practice this means that Schools, Directorates and Professional Support Departments must check, for example, that adequate operating instructions have been provided with the equipment and that there is information about residual hazards such as noise and vibration.

More importantly, the equipment must be checked for obvious faults, must carry a CE marking and be accompanied by relevant certificates or declarations. Suppliers and manufacturers will also supply guidance on what a piece of equipment can be used for. Further advice is provided in the HSE's leaflet "Buying new machinery". A copy can be downloaded from the Health and Safety Executive website via the following link http://www.hse.gov.uk/pubns/indg271.htm

Specific Hazards

All Schools, Directorates and Professional Support Departments must prevent (or if that is not possible, control) the exposure of staff using work equipment to any of the following hazards: -

- dangerous articles or substances falling from, being ejected from or produced by the work equipment
- o rupture or disintegration of equipment
- equipment catching fire
- o explosion of equipment or substances used or stored within it
- high or very low temperatures
- o lack of stability of work equipment
- o unforeseen events requiring rapid response with emergency stops controls
- insufficient lighting

This is not an exhaustive list.

All Schools, Directorates and Professional Support Departments must take effective measures to prevent access to dangerous parts of machinery or to stop the movement of any dangerous part of equipment before any part of a person enters a danger zone.

Work equipment must have controls for starting, making significant changes in operating conditions (speed, pressure etc) and stopping the equipment, including emergency stop controls. The controls must operate in a safe manner and be clearly identifiable. In addition, where appropriate, work equipment must be provided with suitable means for isolating it from sources of energy.

Only persons who are specifically designated and sufficiently informed, supervised and trained should be allowed to use or maintain work equipment.

Markings and Warnings

Where significant risks exist, work equipment must be marked in a clearly visible manner. Warnings or warning devices must be incorporated which are unambiguous, easily perceived and easily understood.

Any markings must conform to BS 5378 or the requirements of the Health and Safety (Safety Signs and Signals) Regulations 1996.

Mobile Work Equipment

PUWER 98 has a number of Regulations specific to mobile work equipment, which apply in addition to the general requirements of PUWER 98.

PUWER contains specific duties regarding mobile work equipment, for example fork-lift trucks. Mobile work equipment (MWE) is any work equipment, which carries out work while it is travelling, or which travels between different locations where it is used to carry out work.

Any Schools and Professional Support Departments that use mobile work equipment should consult the Approved Code of Practice and Guidance, Safe Use of Work Equipment to establish where they will need service procedures to control risks relating to MWE.

A copy of the Approved Code of Practice and guidance, Safe Use of Work Equipment can be downloaded from the Health and Safety Executive website via the following link http://www.hse.gov.uk/pubns/books/l22.htm

4 Further Information

There are two Approved Codes of Practice Associated with PUWER 98 i.e. "Safe Use of Work Equipment" and "Safe Use of Woodworking Machinery". These two ACOPs are therefore complementary and may best be read together.

A copy of the Approved Code of Practice and guidance, Safe Use of Woodworking Machinery can be downloaded from the Health and Safety Executive website via the following link http://www.hse.gov.uk/pubns/books/l114.htm