

ARRANGEMENTS: CONTRACTOR HEALTH AND SAFETY REQUIREMENTS

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1. DISCLAIMER

The Estate Support Service (ESS) of the University of Newcastle upon Tyne (the University) has prepared this document in order to assist staff and contractors to work safely on University sites and abide by University requirements.

Every effort has been made to explain local conditions, site rules and legal obligations, however, responsibility to understand and observe relevant legislation remains with the contractor at all times.

It is the duty of each contractor to check that references in this document are current, eg Regulations, British Standards, etc, informing the University where this or any other is inaccurate.

No work is to be enacted when there are any unresolved issues regarding information contained within this document.

Implementation of, and compliance with, these requirements in no way reduces, limits, lessens or restricts the contractors responsibilities and duties under the terms of any contract or applicable legislation.

This document shall be read together with all others which form the contract, where applicable.

2. INTRODUCTION

This document has the very important task of explaining your health, safety and environmental obligations as the contractor when working at the University. It is also designed to make you aware of the unique health and safety and environmental issues which you may come across on campus.

ESS is responsible for the construction of new and alterations to existing buildings and accommodation, maintenance of University grounds, and the security, maintenance and cleaning of over 150 buildings.

As the controller of premises, the University has a statutory and social duty to ensure, so far as is reasonably practicable, the health, safety and welfare of all its employees whilst at work; this duty extends to ensuring that activities undertaken by or on behalf of the University do not endanger others who may be affected. The University and ESS health and safety policies recognise these duties and provide for specific arrangements to be made to deal with specific risks.

This document has been prepared to help staff, contractors and their employees to work safely, and prevent accidents and injuries to themselves and to University personnel. These arrangements also aim to assist contractors in complying with the Health and Safety at Work, etc., Act 1974 and relevant regulations in relation to working on the University estate.

All contractors and their employees should be conversant with the safety rules of the faculty, school or area in which they are working and the Contractor's Representative has the responsibility for ensuring that this is so.

All contractors working on University premises must conform to these requirements and it is the contractor's responsibility to ensure that all of his employees and those of his sub contractors who will be working within the University are aware of the contents of this document. However this does not, in any way, relieve the contractor of his legal or contractual obligations. Failure to comply or to provide competent personnel could prejudice contractors from being awarded future work.

3. DEFINITIONS

- 3.1 Contractor: any organisation(s)/consultant(s)/person(s), etc that ESS engages to undertake work for or on behalf of ESS who is not an employee of the University; (this includes work of a non 'construction' or 'building' nature). Work undertaken by a contractor may include, for example:
- design and related services;
 - repair, clean, service or maintain equipment or structures
 - commission or decommission equipment or plant
 - install, inspect or test equipment or plant
 - construction, alteration or redecoration of structures
 - dismantling or demolition of structures
 - utility related work
 - road works, civil engineering
 - gardening and grounds maintenance
 - pest control
- (The above list is illustrative only.)
- 3.2 Sub contractor: any organisation(s)/consultant(s)/person(s) etc engaged by a contractor to undertake work for, or on behalf of, ESS, who is not an employee of the University or the contractor.
- 3.3 Contractors Representative: an employee of the contractor/subcontractor nominated to ensure compliance with these requirements and to liaise with ESS, Estates Representative and or School Contract Coordinator.
- 3.4 Client: the person for whom a project is carried out, whether it is carried out by a contractor or in-house staff.
- 3.5 Estates Representative: an employee of ESS appointed to implement these arrangements, e.g. Maintenance Officer, Project Manager, Supervisor, etc.
- 3.6 Estates Health and Safety Officer: a professional safety and health practitioner employed by ESS to advise on occupational safety and health issues.
- 3.7 School Contract Coordinator: the person nominated by Heads of School to liaise with the Estates Representative.
- 3.7.1 In buildings occupied by more than one School:
- for works confined to areas occupied by one School, the School Contract Coordinator for that School will liaise with the Estates Representative.
 - for works affecting areas occupied by more than one School, a lead coordinator will be nominated through consultation between all affected Heads of School and the relevant School Safety Officers
- 3.8 School Safety Officer: the person nominated by the Head of School to co-ordinate the day to day running of safety issues within their School

- 3.9 University Safety Office: a team of professional safety officers employed by the University to advise on safety and related issues.
- 3.10 Construction work: the carrying out of any building, civil engineering or engineering construction work and includes:
- the construction, alteration, conversion, fitting out, commissioning, renovation, repair, upkeep, redecoration, maintenance (including cleaning involving the use of water/abrasive at high-pressure or corrosive/toxic substances), decommissioning, demolition or dismantling of a structure;
 - preparation, site clearance, exploration, investigation (but not site survey), excavation and foundation work;
 - installation, commissioning, maintenance, repair or removal of mechanical, electrical, gas, compressed-air., hydraulic, telecommunications, computer or similar services which are normally fixed within or to a structure;
 - assembly or disassembly of prefabricated units forming a structure;
 - removal of structures or parts of structures or waste resulting from demolition, dismantling or disassembly of structures or parts of structures.
- 3.11 Structure: means:
- any building, steel or reinforced concrete structure (not being a building), pipe or pipeline, cable, sewer, road, river works, mast, underground tank, earth retaining structure and any other similar structure;
 - any form work, false work, scaffolding or other structure to provide support or means of access during construction work;
 - any fixed plant where work involves risk of a person falling.
- 3.12 Scope:

These arrangements apply to all staff and contractors employed by ESS and to subcontractors employed to work on the University Estate¹. Responsibility for managing contractors engaged to supply, fit and maintain Schools equipment is the responsibility of the School, unless ESS have been instructed to engage them on behalf of the School.

4. ROLES AND RESPONSIBILITIES

- 4.1 Responsibility for safe working cannot be left entirely to contractors or subcontractors. The client has a duty to ensure, so far as is reasonably practicable, that contractors have safe working procedures and adhere to them. ESS, where appointed, undertakes this on behalf of 'client' Schools.
- 4.2 ESS is responsible for:
- engaging competent contractors;
 - providing the appropriate health and safety information to contractors; including risk assessments when necessary;
 - monitoring contractors to ensure they comply with relevant requirements;

¹ This includes Kings Campus, the Campus for Aging & Vitality, Science Central, the International Centre For Life & all associated and outlying sites, e.g. Farms, Coastal Laboratories, sports grounds, accommodation sites, etc.

- liaising with other University Schools who may be affected by the contractors activities;
- ensuring, so far as is reasonably practicable, that all work carried out on the University estate is arranged by or through ESS;
- ensuring, so far as is reasonably practicable, that all relevant legislation and good working practices are adhered to.

4.3 The Estates Representative is responsible for:

- appointing competent contractors (those with adequate resources, training, experience and knowledge for the work for which they will be employed);
- selecting contractors who are compliant with CHAS within the last 18 months (see also EOSHProc09.1 Contractor Procurement Flowcharts);
- ensuring that contractors provide appropriate site/job specific health and safety information; contractors not listed on CHAS as compliant within the last 18 months will also be required to provide general health and safety management information prior to each project;
- providing access to relevant University/ESS health and safety information pertaining to the work area to allow the contractors to take adequate measures to protect his employees, and others who may be affected;
- carrying out contractor induction;
- ensuring that any necessary permits to work are issued;
- monitoring the performance and reporting any shortcomings of the contractor's activities while executing the work; feedback can be included on the CHAS database via the Estates Health and Safety Officer;
- ensuring that any areas in which contractor employees are expected to work are maintained safe and free from hazards which may be caused by University staff or operations;
- liaising with University staff or representative (e.g. School Contract Coordinator) who may be affected by the works, or by any change in conditions caused by the works;
- controlling contractors in accordance with these arrangements.

4.4 The School Contract Coordinator is responsible for:

- informing the School Safety Officer of the intended works;
- ensuring that school specific hazards are identified to the Estates Representative for consideration during planning;
- notifying the Estates Representative of potential unsafe working by contractors in their area;
- acting as liaison between the School and the Estates Representative.

4.5 Contractors are responsible for:

- ensuring that adequate resources are available to undertake works in compliance with these arrangements, legislation, the University and ESS Health and Safety Policies and the Contractor Management and Control (EOSHArr09) document;
- ensuring all their employees, and any sub contractors, have the correct training, knowledge and equipment to carry out the works safely (including relevant induction);
- providing all necessary risk assessments and method statements specific to the works and ensuring their availability on site;
- adhering to all statutory and University requirements relating to the works;
- providing, in good time, information on any hazardous materials that are to be brought to site to execute the works;

- conducting regular safety inspections of all assigned areas and providing details to the Estates Representative for monitoring purposes;
- identifying and correcting hazards which are under their control;
- co-ordinating and co-operating with the Estates Representative;
- maintaining adequate insurance cover in respect of the works and public liability;
- establishing and maintaining effective housekeeping;
- disseminating site induction to all employees, any sub contractors employed to execute the works and any authorised visitors to site;
- ensuring that subcontractors are competent (undertaking a relevant health and safety assessment to establish this);
- managing any sub-contractors engaged on the works.

4.6 Sub contractors are responsible for:

- executing the works safely in compliance with statutory, University, ESS and contractor requirements;
- co-operating fully with the contractor, the University and ESS.

5. DOCUMENTATION

5.1 Risk Assessment

Contractors shall undertake risk assessment in relation to the work to be carried out as required by and in accordance with the Management of Health and Safety at Work Regulations. Risk assessments shall be provided to the Estates Representative when requested (copies should be available on site).

5.2 Safe Systems of Work

Where the need for a safe system of work (e.g. safety method statement/permit to work) is identified as a result of the risk assessment process relevant documentation shall be provided to the Estates Representative, when requested, prior to work commencing (copies should be available on site)..

Where a principal contractor is appointed they are required to ensure appropriate documentation is provided by subcontractors.

5.3 Permits to Work

In the case of especially hazardous work, or where contractors operations may need to be especially co-ordinated with those of the University to ensure safety, the work may need to be governed by means of a formal permit system.

University permits to work may be issued by Schools or ESS through the Estates Representative and the University's requirements will be explained to the contractor in advance. The relevance of such a system to the work to be undertaken will be discussed wherever possible during the planning stage.

The Contractors attention is drawn to the list of Permits to Work at Appendix 1.

5.4 Safety Method Statements

Safety method statements should indicate how the hazards associated with the work being carried out in any given area are to be controlled. They must address site specific issues and detail how the work is to be undertaken in light of the hazards and other requirements in the area concerned. A description of how the work is to be carried out and details of any equipment used and specific training requirements should also be included. This documentation should be available on site during ongoing work.

6. MONITORING

During the implementation of the contract the Estates Representative shall monitor occupational safety and health performance by:

- monitoring the work of contractors to ensure that all legal requirements are met and that required documentation is available on site;
- ensuring regular site inspections are conducted of/by the contractor;
- advising the contractor on newly identified hazards and risks;
- monitoring and following up on corrective actions when non-conformances are identified;
- the review of accident and incident reports, and third-party reports (i.e. HSE) and complaints;
- regular meetings with the contractor

Records shall be kept of any occupational safety and health performance issues.

6.1 Accident Reporting

An accident is defined as an unexpected or undesired event, especially one causing injury or damage.

An incident is a potentially hazardous event that did not cause injury or damage but could have (i.e. a dangerous occurrence on in this).

Report all injuries, illnesses and incidents, no matter how small, to the Estates Representative; dependent on the circumstances the University accident report form may require completion.

If serious personal injury or damage to plant occurs, the area must be left untouched until advice is received from the Estates Representative. This does not apply where interference is necessary to aid or revive any person involved in an accident or to prevent further injury to persons or property.

6.2 Non-Compliance

The University reserves the right to conduct inspections and audits at any time so as to confirm compliance with these and other, including, legislative requirements. A serious breach or persistent or regular minor breaches of University requirements may lead to the termination of the contract in accordance with its terms.

The Estates Representative, the Estates Health and Safety Officer, and Officers from the University Safety Office are empowered to stop the work immediately at any time if unsafe practices are being used and there is an immediate risk to any individual working on site, any third party, or member of the public.

The Estates Representative also reserves the right to insist on the removal from site of any individual found to be in breach of University requirements. Where a particular practice has been identified as unsafe in the opinion of the Estates Representative (or other appropriate officer) the contractor will be informed and requested to terminate the activity immediately. If an alternative safe method of

proceeding can be agreed the contractor shall adopt this method and proceed with the work, noting any revisions in the safety method statement and any other relevant documentation.

If no alternative safe method is available the contractor will be asked to cease work until a suitable safe method is identified. A revised safety method statement and other required documentation should be forwarded to the Estates Representative for authorisation prior to work recommencing.

The University treats instances of safety negligence very seriously. Should any ESS staff observe any contractor, or their employees, acting in an unsafe manner, the contractor will be required to take immediate action. The Estates Representative will be advised and the incident will be recorded.

Should repeat instances be observed, the conditions of contract will be reviewed and the contract may be terminated.

Failure to wear personal protective clothing and equipment when it is necessary is an example of safety negligence. Another example is incorrect use or handling of hazardous materials.

Non-compliance with workplace health and safety and environmental legislation or the University's health, safety and environmental requirements will be taken very seriously. ESS assesses contractors not only on their ability to meet construction requirements of the job, within time and cost restraints, but also on their willingness to perform their work at a high level of safety and health.

Should any staff, including contractors and their staff, observe or become aware of anyone acting in an unsafe manner, they will be required to take immediate action. The Estates Representative will be advised and the incident will be recorded. Contractors or their staff may be asked to leave the site.

7. GENERAL REQUIREMENTS

7.1 The Construction (Design and Management) Regulations (CDM)

The Contractor is to familiarise himself with the requirements of the Regulations and must discharge his duties accordingly. Duty holders under the Regulations include the Principal Contractor, and other Contractors, as well as the Client, Designers and CDM Coordinator, the latter being appointed to coordinate health and safety on the project; this role may be performed by any one of the duty holders or may be a separate appointment.

Part 2 and 4 of the regulations apply to all construction projects; additional duties are included in Part 3 of the regulations and these apply where a project is notifiable. Notifiable projects are those lasting for more than 30 working days, or which will involve more than 500 person days of work. The duty to notify the project is that of the CDM Coordinator and they will ensure the notification form (F10) is sent and that the Client is advised and assisted to ensure the client duties have been fulfilled. The CDM Coordination will also ensure that Designers comply with their duties to eliminate or reduce risks and provide relevant health and safety information with their designs; this applies to all design work in all phases.

Application of the CDM Regulations will be identified at the planning stage and the requirements implemented accordingly. Contractors will receive with their pre tender package a copy of ESS pre-construction information (including, eg, Risk Assessment/Hazard Elimination & Management Form). The Principal Contractor, as defined in the Regulations, is required to develop the Health and Safety

Plan with the assistance of the CDM Coordinator, and the University will require this to have been satisfactorily completed before work commences on site and will be revised and updated as necessary during the works

The Principal Contractor is responsible for the safety of the works on site and must include within the developed Health and Safety Plan, safety method statements and other required safe systems of work relating to activities to be undertaken.

The Principal Contractor is required to provide, to the CDM Coordinator, information relating to the safe construction of the works, and must provide information to facilitate the CDM Coordinators provision to the Client, of the Health and Safety File by the date of Practical Completion of the works.

7.2 Construction and Refurbishment Work

Before commencing any work on campus, issues such as site parking, vehicular access, materials handling, environmental protection, waste disposal and pollution control measures should be considered and discussed with the Estate Representatives.

Contractors must conduct regular site induction sessions for all subcontractors to ensure that they are fully aware of University and site requirements.

All contractors who undertake work of a construction nature must be registered with the Considerate Constructors Scheme and each site (with an expected duration of 6 weeks or longer) should be notified to ensure required monitoring visits take place.

7.3 Remedial Work

The contractor must have an order number and contact details when arriving on site to carry out remedial work. The Estate Representative should be advised upon arrival and whenever leaving the site.

7.4 Preventive Maintenance

For preventative maintenance work, the contractor should contact the Estates Representative to confirm that the work can be carried out.

7.5 Communications

In all cases, safety will be dependent on good communications between the contractor and his nominated point of contact at the University. As this document relates to estate office appointed contractors the point of contact is described throughout this document as the Estates Representative. This person will be made known to you when you are appointed/allocated work, you may also be required to liaise with specific contacts within the faculty, school, building, area, etc. that you are to work in. This is likely to be the School Contracts Coordinator.

In any case of doubt regarding the application of the requirements outlined herein, or in any circumstances affecting safe working not covered in this document, advice should be sought in the first instance from the Estates Representative, through whom additional copies may also be obtained.

7.6 Identification

All contractors and subcontractors must display identification which identifies their name and that of their company while working on University premises

7.7 Starting Work

Before work commences, the Estates Representative must be informed so that the appropriate arrangements for health and safety can be made. The Estates Representative will require information in relation to start dates, time, duration of work, etc. in order that appropriate notification can be given to University areas, staff etc potentially affected by the works. If not already provided copies of site specific safe systems of work (safety method statement/risk assessments) will be required prior to work starting on site.

Special arrangements will be necessary if the work is in ducts or other confined spaces, on roof areas or adjacent to fume cupboard outlets. The contractor is must ensure that he is familiar with all permit to work systems the University has in place.

Where work is to be carried out in laboratories contractors shall also observe the requirements stated in this document in the 'Special Hazards' section.

The University school is responsible, in the first instance, for preventing exposure of contractors to chemical, biological, or radiological hazards.

Contractors and the School Contract Coordinator should liaise before work commences, and special arrangements should be made when necessary. The Estates Representative will, when relevant, advise the contractor of this School Contract Coordinator.

Where work is to be carried out within and outside occupied premises, the contractor shall ensure that the work is carried out with a minimum of inconvenience to the occupants of the premises. All installed equipment, furnishings, etc. are to be protected against damage by dust, dirt, shock or other cause.

The contractor shall not carry out work at any time without the full knowledge and approval of the Estates Representative. The contractor shall liaise with the Estates Representative and obtain permission to proceed before any existing plant is shutdown.

Work to electrical, fire and mechanical services must be programmed and carried out so that normal operation of these services in the occupied premises is not affected or interrupted.

The contractor should advise, where appointed, the School Contract Coordinator that they are about to commence work in the building.

7.8 Hours of Work

The University needs to maintain an environment which is conducive to learning and research. Excessive noise can impact on this and all people working at the University, including staff and contractors, must be mindful of sensitive periods during the year. In particular, the planning of any work must be done in consultation with staff that may be affected by noise due to their proximity to the work site. This would include not only staff directly within a building but also staff who may be adjacent to the workplace, e.g. work being done outside a building but which may impact on the occupants of adjacent buildings.

The following circumstances should be taken into account when planning work:

- examination periods;
- teaching time;
- planned seminars;
- laboratory experiments;
- the way vibration may impact; and
- graduations.

Normal hours of work for contractors on campus are 8am to 5pm, Monday to Friday. Other times may be required and should be agreed in advance with the Estates Representative at which time reporting and other supervision requirements will be agreed.

7.9 Notification of Presence

Contractors are required to record their presence when entering or leaving site. Arrangements appropriate to the nature and duration of the works will be established prior to any work commencing on site and contractors will be informed accordingly. Where appointed the Principal Contractor is responsible for implementing appropriate arrangements. Requirements are further detailed in the Contractor Management and Control document (EOSHProcArr09).

7.10 Security

Security staff patrol the campus 7 days a week, 24 hours a day, year-round. They should be contacted for any security problems, e.g. fire, damage or theft.

Security Control Centre can be contacted on (0191 222) 6817.

Emergency contact (0191 222) 6666.

7.11 Use of Lifts

Where the use of a lift or lifts is necessary the contractor will fully protect the lift. This can be by either:

- 6mm ply board, adequately fixed to the walls and floor (allow for cutting around the control panel)
- installation of a 'lift protection kit' which comprises: a padded curtain and hardboard sheets.

The type of protection is to be agreed with the Estates Representative who, if required, will arrange for the installation of the lift protection kit.

The contractor is to allow for periodic inspection of the lift and lift tracks and is to ensure these are kept free of debris at all times.

The contractor is liable for any repairs deemed necessary by the Estates Representative, as a result of damage caused by or as a direct result of the work being carried on.

7.12 Protection of Landscaped Areas

Contractor vehicles, equipment and access routes should be used in such a manner as to limit any damage to landscaped areas, paving and other similar surface finishes. The contractor is responsible for any reinstatement work deemed necessary by the Estates Representative as a result of damage caused by or as a direct result of the work being carried on.

7.13 Conduct

During work on site the Estates Representative, contractors and their staff are to ensure the least amount of disruption as possible to students, staff and visitors to the University.

Offensive behaviour, by any party, will not be tolerated, for example:

- all behaviour and language that reinforces inappropriate, demeaning or discriminatory attitudes or assumptions about persons based on age, race, sex, disability, sexual orientation, transgender status, or marital status; and
- behaviour such as whistling, unsolicited remarks of a sexual nature and swearing.

Noise near buildings should be kept as low as possible and loud radios and other music are not permitted.

7.14 Dress Standards

Contractors should ensure that their employees and subcontractors are dressed appropriately at all times; including appropriate footwear. Contractors staff should be neat and tidy in appearance and the legs and torso should be covered at all times; tops should not be removed during hot weather, particularly where working outside.

7.15 Use of Mobile Phones

The use of mobile phones is allowed provided external communication is a requirement of the role they fulfil. Their use must be kept to a minimum and they must not be used whilst work activities are being performed or equipment is being used. There are some areas where the use of mobile phones is prohibited, these areas are well signed and these restrictions must be observed.

8. SAFE ENVIRONMENT

8.1 Training and Competence

Contractors are obliged to advise ESS of any changes in their organisation so that safety induction training can be organised. Please contact the Estates Representative in this instance.

The contractor shall ensure that all of its personnel, agents and subcontractors are trained, competent and fit to perform the duties assigned to them. They must be informed by the contractor of all relevant hazards and given instruction in the corresponding safe methods of work, including but not limited to, the correct use of personal protective equipment. This requirement will be aided by ensuring appropriate documentation is available on site (i.e. safety method statements, etc.).

All contractors and their staff must have appropriate training for equipment in use. When performing tasks that require specific certification this must be available on site for presentation if requested, e.g. abrasive wheels.

8.2 Induction

Aside from the generic information about working at the University contained in this guide, all contractors are required to attend a local induction involving the areas of the University which they will be working at. Local inductions are arranged and delivered by the Estates Representative and may involve staff from other areas of the University as required. Special inductions may be required for laboratories or other high-risk areas within the University.

Other contractor employees or sub-contractors which are employed after the initial local induction are to be inducted by the principal (or employing) contractor. Records of this training are to be recorded using either the contractors own induction form or the University's form (EOSHForm09.6 Contractor Induction Form). Records are to be forwarded to the Estates Representative at the end of each month.

8.3 Site Isolation

All construction and maintenance work is to be isolated from other activities, students, staff and visitors to the University. Where this cannot be controlled by closing off areas of buildings or using a spotter to stop access to the area, then barriers or more substantial hoardings are required. If at any stage during the work the chosen method of isolation is found not to be successful, then a more appropriate control is to be implemented. This may also be required if the Estates Representative considers, from past experience, the control to be inadequate.

Under no circumstances is construction or maintenance work to be carried out above a member of staff, or in any way that exposes others to an increased risk of injury.

Where a contractor is carrying out work on University premises such as the breaking or dressing of stone or concrete, grinding of metals, etc, they are responsible for the implementation and maintenance of appropriate control measures as may be required to protect all persons potentially at risk, e.g. screens, enclosures, dust suppression/extraction, etc.

8.4 Site Cleanliness

The work site and surrounding area should be kept clean, tidy and in good order; any safety or fire hazards should be removed promptly (e.g. oily rags, flammable materials and rubbish). Excavated or demolished and other waste materials removed from the site into safe storage (skips etc) on a minimum of a daily basis.

Be aware of other safety actions such as replacing lids on containers, wiping up spills, removing or bending over nails or bolts and removing other dangerous protruding objects progressively.

The contractor shall, prior to completion of work, cleanup, remove and dispose of safely and in an environmentally acceptable manner, all materials brought on site and waste generated while on site. The contractor shall leave the work area in a clean condition to the satisfaction of the Estates Representative. Particular care shall be taken to ensure that the work area is kept as clean and tidy as possible so as to minimise associated risks.

Provision of waste disposal facilities is the responsibility of contractors who must ensure that adequate arrangements are in place. Where skips, etc are already in situ there may be additional capacity available for use by contractors; however this must be agreed with the Estates Representative *prior* to use.

See also 'waste'.

8.5 Safety Signs

Safety signs are located throughout the University campus to protect your health and safety. Safety signs of different colours and shapes mean different things.

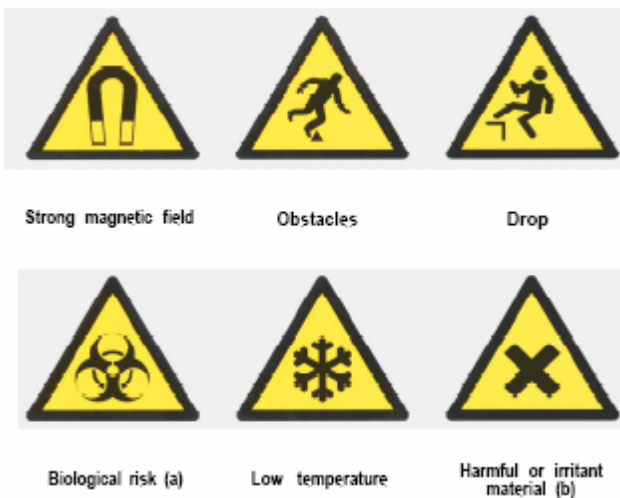
Prohibitory signs

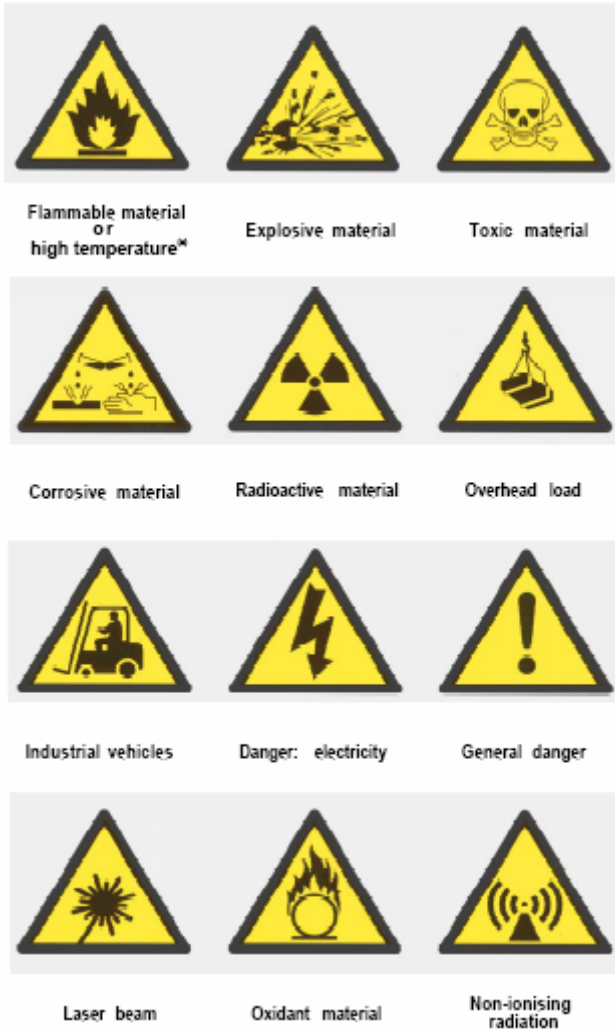
These inform you of something that **must not be done**. They are round in shape and contain a black pictogram on a white background with red edging and diagonal line, for example:



Warning signs

These warn of hazards and dangers or risks to your health and or safety. They are triangular and contain a black pictogram on a yellow background with black edging, for example:





Mandatory signs

These inform of actions, etc that **must** be followed. They are round and contain a white pictogram on a blue background, for example:





Safety overalls must be worn

Face protection must be worn

Safety harness must be worn



Pedestrians must use this route

General mandatory sign (to be accompanied where necessary by another sign)

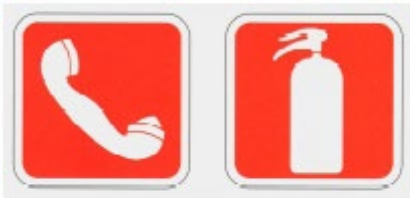
Fire fighting signs

These indicate the location of fire fighting equipment; they are rectangular or square in shape with a white pictogram on a red background and may be supplemented by directional arrows, for example:



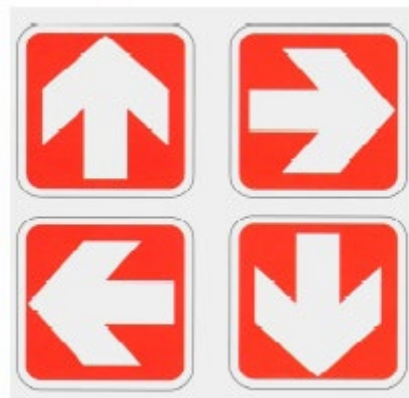
Fire hose

Ladder



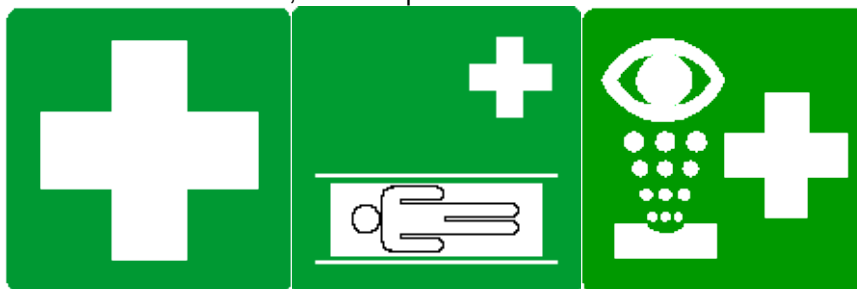
Emergency fire telephone

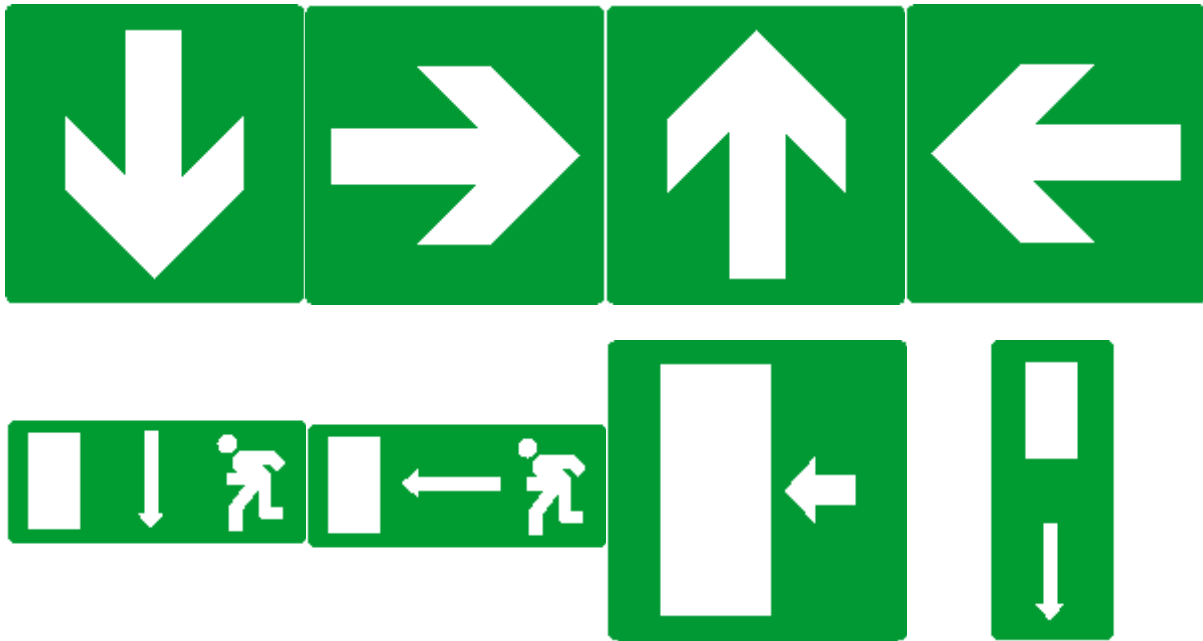
Fire extinguisher



Emergency escape and first aid signs

These indicate a **safe condition**; they are rectangular or square with a white pictogram on a green background and may be supplemented by directional arrows in the case of emergency escape routes or contact details in the case of first aid, for example:





Containers and pipes

Where containers and pipes contain dangerous substances they will generally have signs or labels fixed to them. The exceptions are:

- where the risk is adequately controlled or is not significant
- where the pipe is short and connected to a container which is clearly signed.

These signs may be supplemented by additional information, e.g. the name of the substance and details of the hazard.

Using signs to mark obstacles, dangerous locations and traffic routes.

To help prevent access of unauthorised personnel to work locations, where it is not practicable to use secure fencing or similar, marking the area will be necessary. This should be by use of striped tape consisting of yellow and black or red and white diagonal stripes, for example:



8.6 Smoking

The University campus is a no smoking area and as such no smoking is permitted in any work areas, including construction site. The University recognises the right of an individual to work in a smoke-free environment.

8.7 Alcohol and Drug's

The risk level associated with hazards in the workplace can be significantly increased by alcohol and other drugs. Contractors are required to ensure persons affected by alcohol or other drugs are not permitted to carry out work on University grounds. The consumption or abuse of drugs, including alcohol, is not permitted on construction, refurbishment or maintenance workplaces at the University.

8.8 Pets

Pets are not to be brought on to University grounds. Dogs accompanying people with disabilities are the only exception.

9. FIRE SAFETY

Many areas of the University are covered by automatic detection and alarm systems linked to the fire service. If works may involve the generation of dust, moisture, aerosol sprays, fumes or mechanical damage to detection equipment, contractors shall ensure that fire alarms are temporarily isolated and that a robust means of ensuring reinstatement of such at the completion of work each day is in place.

It is vital during work in any occupied building that the integrity of fire alarm systems and escape routes are maintained or adequate temporary alternative arrangements be put in place. Before starting work, contractors must confirm with the Estates Representative that the necessary arrangements have been made.

The use of flame lights or the application of heat e.g. welding or burning is prohibited in many areas of the University for a variety of reasons. Contractors and their employees must seek permission for these activities from the Estates Representative, but in the absence of any specific restrictions, must assume that smoking etc, is prohibited. Hot work may not be carried out without a permit to work.

See also 'hot work'.

Highly flammable solvents, or materials containing them may only be used after prior discussion with the Estates Representative.

See also 'hazardous substances'

Contractors are responsible for the provision of suitable and sufficient fire-fighting equipment appropriate to the work involved.

Contractors and their employees should, on arrival at the work site, check for the following fire safety matters:-

- 1 The nearest means of escape in case of fire.
- 2 The location, type and method of operation of the nearest on-site fire fighting equipment.
- 3 The location and method of operation of the nearest fire alarm.

Contractors must obey alarm signals whilst on University premises and the Contractors Representative must identify and report their presence to the appropriate member of the University's staff. In the case of fire alarms or practice evacuation this is normally the School Safety Officer.

9.1 Evacuation

Procedures are displayed in all buildings at the University describing emergency exits, and assembly points, etc; requirements for the areas within which work is to be carried out will be provided by the Estates Representative; in general the following applies.

If you hear continual alarm bell or are requested by a Fire Warden or other member of staff, to evacuate the building you must:

- leave the building immediately by the nearest – make sure you leave your area safe;
- proceed to the assembly area indicated on the evacuation map (or as advised);
- contact the Estates Representative and inform them of the situation;
- remain in the assembly area until advised the emergency is over;
- do not re-enter the building until advised it is safe to do so by a Fire Marshal, Security Officer or member of the fire service.

9.2 Should You Discover a Fire

Raise the alarm by activating the nearest call point, evacuate the building and as soon as possible contact Security Control and provide them with details of the location of the fire; Security Control will contact the fire brigade.

Security Control emergency contact number (0191 222) 6666

When calling Security Control, advise them of the following:

- nature of the emergency;
- location;
- casualties;
- which emergency services are required;
- if on a dedicated building site, the level of assistance required.

Once Security Control has been notified of the emergency the Estates Representative should be informed of the situation.

9.3 Fire Fighting Equipment

The contractor is required to provide fire extinguishers appropriate to the hazards present on site. These need to be regularly inspected and maintained in accordance with fire legislation. Fire extinguishers are located in University buildings to aid evacuation in the event of an emergency; these should not be relied on by contractors and therefore omitted from consideration during risk assessment.

9.4 Hot Work

Hot work, including welding, thermal or oxygen cutting or heating and other related flame, heat or spark producing operations, are not to take place in any building area without a hot work permit. The Estates Representative will issue hot work permits; the contractor will comply with permit requirements.

The Contractor is required to notify the Estates Representative of the commencement and safe completion of such work in compliance with the issued permit; hot work must cease at least two hours before the end of the working day.

10. SPECIAL HAZARDS

Due to the variety and nature of activities carried out at the University for teaching, research and development, you may come across work activities which are unique when compared to average workplace where you carry out contracting work. In many cases these activities can be hazardous if the correct controls are not followed. The Estates Representative and or School Contract Coordinator will provide you with relevant information.

Where Contractors operations are expected to create special hazards, e.g. in the application of heat, demolition work, or the use of dangerous articles or substances, the attention of the School/area concerned via the Estates Representative or School Contract Coordinator must be specifically drawn to the hazards, so that adequate precautions may be agreed and taken by both parties.

It is the contractors responsibility to acquaint his employees with these hazards and with procedures and requirements set out herewith, as well as relevant legislation, regulations and mandatory requirements.

10.1 Asbestos

Like many buildings built before the late 1980s, a number of buildings at the University used asbestos containing materials at the time of construction. These products include floor tiles, asbestos cement piping and sheeting, pipe and boiler insulation, ceiling tiles, insulation around heater banks in air conditioning duct work, laboratory equipment such as autoclaves, old electrical switchboards etc.

The University has separate arrangements dealing with the identification, management and removal of asbestos, and takes steps to ensure that contractors will not encounter asbestos unexpectedly. The possibility that this will occur however cannot be totally eliminated.

Relevant information will be provided to contractors by the Estates Representative prior to the start of work; however materials must be assumed as suspect unless otherwise confirmed through the relevant documentation.

Where contractors unexpectedly encounter material they suspect to be asbestos, they shall immediately inform the Estates Representative and stop work in that area pending further guidance.

Where contractors are engaged to carry out work with asbestos, they shall observe both the statute requirements and the University Asbestos Code.

10.2 Work At Height

Work at height has to be undertaken in accordance with the Work at Height Regulations, this includes the use of ladders and harnesses. All ladders used within the University must be of an industrial standard. Contractors must provide their own access and work equipment; use of University equipment is prohibited.

When work by the Contractor involves the erection of any scaffold, support, shoring or similar structure, he/she is responsible for the incorporation, in addition to the safety of the above, of features such as 'fans', walkways, covers, guardrails, warning lights, etc, as may be necessary for safety. Steps must be taken daily to ensure safety by the removal of ladders or other means of access when work ceases.

Arrangements are also required to ensure that the security of the premises is not compromised by scaffolding, ladders etc outside normal working hours.

Where the University has entered into a separate contract for the provision of scaffolds, the University will make the appropriate arrangements to ensure that the safety of the scaffold is checked initially and at weekly intervals.

Scaffolding is at all times to be erected in a manner, which complies with BS EN 12811-1:2003: Temporary Works Equipment. Scaffolds. Performance Requirements and General Design. Contractors are to familiarise themselves with and comply with the recommendations of the HSE, e.g. CIS49: General Access Scaffolds and Ladders, CIS10: Tower Scaffolds, and relevant guidance available from the National Access and Scaffolding Confederation (NASC).

Where drilled anchors are planned the Estates Representative should be consulted to ensure resultant damage to buildings is minimised. The Contractor is to ensure that pull tests are carried out on at least 10% of the ties on any scaffold prior to use.

10.3 Work Below Ground Level

Under no circumstances shall any trenching, excavation or digging be undertaken without the approval of the Estates Representative. The University has numerous underground services and there is a high risk associated with any type of digging or groundbreaking activity.

Underground services must be positively located, and their presence appropriately indicated and highlighted to those persons carrying out the excavations. The contractor will bear all costs of any damage caused by not gaining appropriate approval.

If there is any variation outside of the original proposal, the contractor is to reassess and seek approval from the Estates Representative.

The work site must be made and kept safe by means of barriers, warning notices, lights etc, at all times. When work is complete, the site must be made good, and any markers, protective covers and warning notices restored.

All trenches and excavations, particularly those adjacent to roads or existing buildings, must be adequately shored, and falls of material prevented by 'battering back', caissons, or other effective means. In particular, the safety of children should be constantly borne in mind and excavations boarded over when work is not actually proceeding.

HSE guidance should be applied as appropriate, when work in excavations is required, e.g. HSG185: Health and safety in excavations, CIS8: Safety in excavations.

10.4 Confined Spaces

A number of confined spaces exist at the University and it is recognised that activities undertaken in confined spaces are hazardous to the worker's health and safety. A confined space is any place, including any chamber, tank, vat, silo, pit, trench, pipe, sewer, flue, well, duct or other similar space in which, by virtue of its enclosed nature, there arises a risk of:

- serious injury arising from fire or explosion

- loss of consciousness from an increase in body temperature or asphyxiation arising from gas, fume, vapour or the lack of oxygen
- drowning arising from an increase in the level of liquid
- asphyxiation arising from a free flowing solid or the inability to reach a respirable environment due to entrapment by a free flowing solid.

When working in confined spaces the requirements of the Confined Spaces Regulations are to be complied with by the contractor and employees.

Where working in enclosed areas care should be taken to ventilate the area well if petrol, diesel or LPG motor driven equipment is being used. The contractor must ensure that fume extraction, airflow and exchanges of air are all maintained as necessary.

Contractors' employees may not enter any confined space without the express permission of the Estates Representative and then only following the issue of a permit to work. If permission has been given work in such places shall be carried out using the methods and taking the precautions outlined in HSE document L101: Safe Work in Confined Spaces.

Only people who are suitably certified to work in confined spaces might do so; proof of confined space training must be presented to the Estates Representative prior to commencing work.

In all cases such work should be planned and a safe system of work produced which addresses site specific issues and emergency procedures. The University operates a permit to work system which must be followed unless the contractor's document has been cleared by the Estates Health and Safety Officer or the University Safety Office.

10.5 Laboratories

There are a variety of laboratories at the University including chemical, radiological and biological laboratories where pathogens, carcinogens, lasers, radioactive material and recombinant DNA work is carried out.

Do not enter a laboratory to carry out work or for any other reason without having been given a specific induction for the laboratory concerned; the Estates Representative and or School Contract Coordinator will arrange for this.

Not all laboratories have the same procedures, many have a significant number of fumes cupboards in operation and experiments in progress; you must follow the procedures laid down below (previously outlined in the leaflet "Safety in Laboratories"):

- Access Arrangements:
 - except in case of emergency, access arrangements are normally made through the Estates Representative following discussion with the School Contract Coordinator;
 - except in case of emergency, ensure you contact the nominated person when you arrive and when you finish;
 - if you don't know the arrangements, ask.
- During Work:
 - Ensure you have sufficient clear area to work in;
 - Ensure your activities don't interfere with others (or theirs with yours);
 - Observe any special safety instructions or local safety rules;
 - Don't smoke, eat, or drink in the laboratory;

- If in doubt, ask.
- Warning Signs:
 - If any of the following signs are on the laboratory door you cannot enter without permission:



The sign for
microbiological work



The sign for
radiation work



The sign for
work with lasers

- If the sign is on plant, equipment or apparatus, you cannot touch it without permission;
- A notice will be posted in rooms and or on equipment and other items involved in set experiments; this will read "Unattended Experiment". In this case the room should not be entered/equipment moved or interfered with without express permission.
- Do's and Don'ts:
 - DO: Tell someone (the Estates Representative if no one else is around) if you have an accident or knock something over;
 - DO: Tell someone (the Estates Representative if no one else is around) if your work plan changes;
 - DON'T: Touch equipment that has nothing to do with your job;
 - DON'T: Touch broken glass with your hands;
 - DON'T: Clear up after an accident until you are told it is safe to do so.
- Remember:
 - To do your eating and drinking outside the laboratory;
 - To cover cuts and grazes with waterproof dressings before you start work;
 - If in doubt, ask.
- Finishing Work:
 - Report to the nominated person in the laboratory when you have finished.

10.6 Fume Cupboards

Work on fume cupboards or the associated ducting/extract equipment, etc is subject to a permit to work which should be issued before work commences. A certificate of cleanliness is required before a permit can be issued which should be available through the School Contract Coordinator. Contact the Estates Representative to progress work of this nature.

10.7 Work in Areas with Animals

Due to potential allergies, bites, scratches, kicks or infections associated with zoonotic diseases, specific procedures must be followed prior to entering areas where animals are kept. If you are likely to be required to work in areas where animals are housed information will be provided to you by the Estates Representative or the School Contract Coordinator.

10.8 Roof Areas

A permit to work system is in place to control all access to roof areas.

If roof work is required or you need access to roof areas to carry out the work you have been appointed for the Estates Representative should ensure that the relevant permit is issued.

DO NOT ACCESS ANY ROOF AREA WITHOUT OBTAINING A PERMIT TO WORK.

11. SERVICES

Contractors must not connect to or interfere with the water supply, drainage system, compressed air, electrical, gas or other services of the University without the express permission of the Estates Representative. Connection of portable electrical equipment such as drills, etc are normally exempt from this; however the requirements outlined in 'electrical equipment must be complied with.

Isolation or reinstatements to University services may only be carried out by University staff and with prior agreement of the appropriate Maintenance Officer via the Estates Representative.

11.1 Existing Services

When a contractors scope of work requires any form of interference (e.g. temporary disconnection, cut-in, modification, etc.) of any existing building services (including, but not limited to, fire, electrical, lifts, hydraulics, etc.), these works are not to be commenced until coordinated and approved by the Estates Representative supervising the work.

Existing services (such as drains, watercourses, public utility and other services) if encountered, obstructed, or damaged in the course of performing the work, shall be dealt with as follows:

- if the service is to be continued: repair, divert, relocate as required;
- if the service is to be abandoned: cut and seal or disconnect, and make safe.

In either case the rectification work must satisfy the authorities concerned.

11.2 Isolation and Lock Off

For your own protection you must ensure that isolation of all equipment, switches and controls required to ensure you are safe while working has been carried out; the Estates Representative should be able to confirm this to you. Ensure appropriate switches, valves, isolators, etc are labelled accordingly. For the protection of others leave other peoples labels alone, do not remove labels that you did not put up. Do not operate switches, etc in contravention of their instructions.

11.3 Underground Cables and Overhead Lines

There are numerous services throughout the University, including electrical cables, pipes, gas and telecommunications services. No excavation work should be carried out without a specific risk assessment being undertaken in consultation with the Estates Representative. The University has plans documenting service locations throughout the University campus; however the accuracy of these cannot be relied on completely and therefore appropriate locating equipment should be utilised. The Estates Representative must be contacted prior to conducting any excavation work which could potentially damage services.

11.4 High Voltage Substations

Access to high voltage substations at the University is to be arranged through the Estates Representative. Only appropriately licensed and trained personnel will be granted access to high voltage substations.

11.5 Interruption to Services

Where any work requires the isolation and or de-isolation of services, to all or part of a building, notice of 14 days must be given to the Estates Representative who will organise the relevant notifications. Shutdown procedures must be used and users of the service must be notified.

Should services be interrupted accidentally the contractor should immediately advise the Estates Representative or if unavailable the Estates Customer Services on 0191 222 7771.

11.6 Damage to Gas Main

In the event that damage occurs to a gas main the following actions should be followed:

- evacuate the immediate area
- do not use mobile telephones in the vicinity of the leak
- notify Security Control on **(0191 222) 6666** to contact Transco and the fire service
- notify the Estates Representative
- restrict access to the immediate area (20 m exclusion zone).

11.7 Damage to Electricity Main

In the event that damage occurs to the electricity main or cables the following actions should be followed:

- do not touch the offending item
- contact the Estates Representative or Security Control on **(0191 222) 6666**
- restrict access to the area (20 m exclusion zone).

11.8 Plant Rooms

Plant rooms across the campus are generally deemed to be normal places of work, however due to the nature of equipment therein access is restricted and available by key entry only. Only persons authorised by ESS (or visitors in the company of an authorised person) may enter a plant room. The contractor will be accompanied by the Estates Representative or, where appropriate, a key will be issued following completion of appropriate Plantroom Access documentation.

12. HAZARDOUS SUBSTANCES

There are a large range of hazardous substances, including chemicals, stored and used at the University. Estates Representatives, contractors and staff should be aware of this and check with the School Contract Coordinator or School Safety Officer for the area concerned to ensure that the workplace is safe and, if necessary, any hazardous substances are removed or made safe before work is commenced.

No substance is to be brought onto site without full details, including those detailed below, being supplied to the Estates Representative by the user of the substance as required by the Control of Substances Hazardous to Health (COSHH) Regulations:

- a full description including product name, use, quantity, etc;
- a full COSHH risk assessment relating to its specific use on site;
- a copy of the safety data sheet;

- where not included on the COSHH assessment, work procedures required for safe storage, use and disposal
- training details of those required to use the substance.

Part used or opened containers must be removed from site upon completion of work (see also 'waste').

12.1 Use of Chemicals

Chemicals and other hazardous substances must be stored and used in accordance with the requirements of the COSHH assessment.

12.2 Chemical Spills

If a spill occurs, limit the area contaminated by preventing further spillage and containing what has been spilt. Block drains and gutters to prevent spread and inform the Estates Representative. Clean up as quickly as possible to reduce the risk of pollution.

If the spill is large or involves dangerous substances **contact Security Control on 0191 222 6666** and ask them to contact the fire service; provide the following:

- location of spill;
- casualties (and or number contaminated);
- details of substance (ensure COSHH data is available on site).

Absorbent material used to contain minor spills can be wrapped and disposed of in normal rubbish skips. Don't wash spills into drains, grids, waterways, etc or pour chemicals on the ground; dispose of / deal with as directed by the relevant datasheet.

12.3 Solvents

Use of substances containing solvents is discouraged; a less hazardous suitable alternative should be used where available as required by the COSHH Regulations.

12.4 Chemical Stores

There are various chemical stores within the University. No repairs or construction work should be undertaken in a chemical store unless the risks have been assessed and where required, all hazardous substances and dangerous goods have been removed and cleaned from the store. Consult the Estates Representative before working in or around a chemical store.

12.5 Dust

Adjoining property owners, residents the public and air handling unit intakes are to be protected against dust, dirt and water nuisance. Dust screens and watering shall be used to reduce dust nuisance.

See also 'Air Quality'.

12.6 PCBs

Due to the hazardous nature of PCBs (polychlorinated biphenyls) to both human health and the environment, precautions are required to be taken with any items at the University that contain PCBs.

PCBs were commonly used up to the mid-1980s as dielectric fluids in electrical equipment such as transformers and capacitors and can be found in metal case capacitors in fluorescent lights. Some equipment is labelled as containing PCBs but if you come across old equipment with no identifying label you should check with the Estates Representative.

Generally, short-term exposure to PCBs such as accidental spills or release of vapours due to overheating of a leaking capacitor does not lead to any long-term health effects. However, excessive amounts of PCBs can cause irritation to the eyes and long-term health problems with skin, hair and liver. PCBs are listed as a probable human carcinogen, i.e. repeated exposure over a period of years may lead to cancer.

Personal protective equipment and clothing required for the handling of PCBs and PCB contaminated equipment in light fixings include nitrile/neoprene rubber gloves and safety goggles.

13. WORK EQUIPMENT

All plant, tools, tackle and equipment used by contractors on University premises must be suitable for the work to be undertaken, must comply with all relevant legal requirements, eg the Provision and Use of Work Equipment Regulations (PUWER) and must be maintained in accordance with appropriate legislation and other safety standards. This includes all hand tools and equipment.

Contractors may not use University plant, tools, tackle or equipment without the express permission of the Estates Representative, which is likely to be given in exceptional circumstances only.

13.1 Handtools

Screwdrivers, hammers, wrenches, files, shovels, etc. must be checked regularly. Where damage or defects are present, the tool must not be used. Proper repair or replacement is the only alternative.

Use an approved method to secure the tool if there is a risk of it falling and injuring people below.

13.2 Electrical Equipment

All electrical equipment must carry a label to show compliance with the inspection and maintenance requirements (HSE guidance HSG107: Maintaining Portable and Transportable Electrical Equipment refers).

Electrical leads must be positioned to prevent trip hazards, where this is not possible they should be contained within an appropriate protective cover. The nearest available power outlet should be used to limit the amount of trailing cable. Electrical leads must be removed from power outlets when not in use.

Leads passing through doorways must be protected from damage. Piggyback leads, splitters and multiple adapters are not to be used; extension leads should not be plugged into extension leads – find a closer outlet.

When electrically powered tools or equipment are to be used their use must be in accordance with the requirements of BS 7671:2001 - Requirements for electrical installations. IEE Wiring Regulations: 16th Edition.

In general, hand held electrical tools should be rated at 110 V and fed from a double wound transformer centre tapped to earth. NOTE: the University's preferred option when using hand held power tools is the use of a 30mA, 30mS Residual Current Device, (automatic safety circuit breaker), or battery powered machines.

Temporary lighting for sites must be fed from a similar centre tapped transformer rated at 50V. For powering cradles/lifts etc the University requires protection of both the supply cable and device by the use of an appropriate safety device to ensure disconnection according to the regulations, eg RCD.

If the location is damp then the requirement under BS 7671 calls for separated extra-low voltage (SELV) – see Guidance Note 5 on the 16th Edition of the IEE Wiring Regulations.

The Contractor or his employees shall not enter any substation, switch room or similar area without the express permission of an authorised Estates Representative who will obtain authorisation from the Operational Maintenance Manager on the Contractors behalf and give permission.

See also 'high voltage substations' and 'PCBs'.

13.3 Generators

The location of temporary generators must be agreed with the Estates Representative prior to their deployment on the University campus. All generators must be of the fully contained type, have the exhaust vented to the top of the generator, include adequate precautions to minimise fuel and oil spillage and be adequately earthed. The maximum noise rating should be 65dBA at 7 m.

13.4 Mobile Plant

All mobile equipment such as front-end loaders, dozers, backhoes, forklifts, tele-handlers, etc. must have the keys removed; blades and buckets lowered onto the ground and must be chocked/blocked when not in use. Relevant certificates and associated documents should be available upon request, including evidence of driver/operator competency.

13.5 Cartridge Operated Tools

Direct action (high velocity) cartridge tools cannot be used at the University. Indirect acting (low velocity) cartridge tools may not be used at the University without prior permission from the Estates Representative who will require the following:

- evidence of operators certification
- details of the tool (which should be of the type that requires two-handed operation), fixing devices and cartridges (all should be from the same manufacturer)
- copy of the risk assessment which should include, for example, consideration of:
 - guarding
 - ricochet
 - splintering
 - noise
 - recoil
 - operation
 - misfire
 - PPE

- Copy of associated safe systems of work/safety method statements, etc
- Copy of thorough examination certificate and general maintenance records
- Details of storage and issue arrangements.

Whenever cartridge tools are being used the area around and behind the work should be cleared of personnel. Cartridge operated tools must not be taken into or used in situations where there is a risk of fire or explosion.

13.6 Portable Pneumatic Equipment

The requirements of the Pressure Systems and Transportable Gas Containers Regulations and PUWER must be complied with; reference to HSE guidance (eg HSG39 Compressed Air Safety) should also assist.

There are many ways in which compressed air can be dangerous, eg:

- it can enter body orifices such as the mouth, ears and anus, causing severe and often fatal injuries;
- at high pressure it can penetrate the skin;
- particles or oil carried in an air jet can damage the eyes;
- oil-coke deposits in a system can spontaneously ignite and cause an explosion;
- vessels containing compressed air, even at comparatively low pressure, can explode violently once their integrity is lost and
- dirty or 'wet' air can lead to corrosion and blocked valves which may make the system unsafe.

Use of this type of equipment should be covered by a site specific risk assessment and appropriate safe system of work, e.g. safety method statement. Equipment shall be subject to thorough examination and records of such available upon requires.

13.7 Cranes and Lifting Equipment

All lifting equipment and all lifting operations must comply with the requirements of the Lifting Operations and Lifting Equipment Regulations (LOLER).

Note: Consideration must be given to the nature of the surface upon which the lifting equipment is to be used. There are a number of ducts and various underground services/overhead cables which could affect the safety of lifting operations; these need to be identified and considered in the risk assessment and lift plan.

There are three key parts to LOLER which require that every lifting operation must be:

- properly planned by a competent person
- appropriately supervised
- carried out in a safe manner.

The Estates Representative must be provided with a copy of the risk assessment and lift plan and must be informed of how those involved with or affected by the lifting operation will be made aware of the parts of the plan relevant to them.

Where the use of cranes or other lifting equipment will require use of areas outside the site boundary or necessitate road closures, etc this must be highlighted in the risk assessment and lift plan and brought

to the attention of the Estates Representative to ensure adequate arrangements are in place and others at the University are informed/involved as required, e.g. Security Control.

All lifting equipment must be operated by trained personnel and evidence of this must be provided on request. Copies of thorough examination records must be available on site for all equipment present. Equipment for lifting people must be inspected every 6 months.

13.8 Guards

Where guards are required they should be fitted, operable and used at all times during machine operation; equipment must not be used with damaged or missing guarding and guarding must not be interfered with in anyway.

All contractors machinery and plant brought onto University premises must comply with the regulations relating to that type of equipment and must, where appropriate, be securely guarded or fenced.

14. WASTE

In disposing of waste contractors must observe their duty of care under relevant legislation. In particular, contractors may not deposit any waste, chemical, or any other substances whatever into drains on University premises, unless express permission has been given by the Estates Representative. See 'hazardous substances' and 'water pollution'.

Waste must be removed progressively to an appropriate bin or skip. Under no circumstances should waste be dumped (a criminal offence) or disposed of by unlicensed waste contractors. All waste is to be traceable through the use of controlled waste transfer notes.

Skips should be located as directed by the Estates Representative following approval, skips must be covered and lockable or isolated behind 'Heras' or similar type fencing to prevent access.

Waste to be deposited directly into a skip should be transferred via a properly constructed chute; where this is not possible waste should be deposited directly into the skip, no throwing or 'bombing' is allowed.

14.1 Recycling and Salvage

Recycling is actively encouraged by the University. The opportunities for recycling will be increasing over the coming years and contractors on site will be expected to encourage materials recycling in both the products they use and the chosen method of disposal for the waste they produce. This includes actively encouraging their employees to recycle the waste they produce whilst working on site. A Site Waste Management Plan (SWaMP) is in under development and will be implemented into future projects.

14.2 Hazardous Waste

Any waste categorised as hazardous under the Hazardous Waste Regulations should be disposed of in accordance with the Regulations. Only licensed contractors are to be used and the relevant consignments notes should be available on request by the Estates Representative.

14.3 Contaminated Waste

If waste is contaminated by chemicals or other hazardous materials/substances it will be required to be disposed of in accordance with the requirements for disposal of the contaminant.

ESS, via the Estates Representative, must be informed about any incidence of soil contamination that may occur or be discovered during the course of work. Do not remove any soil from University grounds without prior approval from the Estate Representative.

14.4 Chemical Waste

Double-check that leftover chemicals are really of no further use. Chemicals should be safely stored in the original packaging and removed by the suppliers of that chemical where possible. If this is not feasible, chemicals are to be stored in sealed containers and clearly labelled with it's contents and associated hazard (including label) together with where it came from. A licensed waste disposal company must be used for safe disposal. Spill kits should be close to the area of storage and appropriate bunding equipment used.

Never tip chemicals down the sink, onto the ground or into drains.

See also 'hazardous substances'.

14.5 Metal Waste

Material such as iron, steel, copper and lead should be recycled using a company holding an appropriate Metal Recycling Site Waste Management License or who are registered as exempt from holding such a license.

14.6 Electrical Waste

Electrical wastes, e.g. lamps, tubes and electrical equipment should be segregated from general waste and disposed of in accordance with the Waste Electronic and Electrical Equipment Regulations (WEEE).

15. VEHICLE & ROAD SAFETY

15.1 Road Safety

The University campus is subject to a speed limit of 10 mph; in pedestrians and other shared areas this is reduced and pedestrians and cyclists always have rights of way.

The University campus presents unusual dangers in respect of road safety, and drivers of vehicles are expected to exercise a high degree of responsibility and restraint. The presence of large numbers of young people must be constantly borne in mind, and contractors and their employees are asked to remember that the Campus is essentially a pedestrian precinct, to which vehicles are allowed access only for loading, unloading and parking, subject to the car parking regulations of the University.

All large vehicles entering University property must be under the control of a qualified banksman when they are reversing.

15.2 Parking

Contractors must park in designated areas and display a valid parking permit when they are parked on University grounds. Permits must be clearly visible and displayed on the vehicle dashboard/windscreen. Failure to park in a valid parking bay, designated parking areas and display a valid permit may result in the vehicle being clamped; Security Control may not be able to release the vehicle immediately.

If you are not sure about where to park your vehicle consult with the Estates Representative and or check with Security Control.

Parking or driving across footpaths and grassed or landscaped areas is prohibited; if these areas need to be accessed then arrangement should be made through the Estates Representative. All repairs to damage landscape will be charged to the contractor. See 'protection of landscaped areas'.

15.3 Vehicles

All trucks and flatbed vehicles leaving the site with material or loose debris shall be loaded in a manner that will prevent dropping of materials on the streets and shall have suitable tarpaulin fastened over the load before leaving the site. Vehicles bringing materials to the site shall be similarly loaded and covered.

The contractor shall ensure that the wheels, track and body surfaces of all vehicles and plant leaving the site are free of mud and that mud is not carried onto adjacent paved sheets or other areas

16. WELFARE ARRANGEMENTS

Contractors are not to use University staff or student kitchens, student living or sleeping facilities, telephones, computers or other facilities without permission from the Estates Representative.

Contractors are required to provide adequate sanitary and welfare facilities for their workforce, including subcontractors, and shall not use University facilities without the prior consent of the Estates Representative. Where University facilities are made available for use by the contractor misuse will result in immediate withdrawal.

16.1 First Aid

Contractors are responsible for the first aid needs of their staff. Notices are posted around the University campus to inform of local first aiders; however the availability of these should not be relied on by contractors.

If an ambulance is called please inform Security Control so that they can direct the vehicle upon arrival.

16.2 Working Alone

Lone workers are those who work by themselves without close or direct supervision. Contractors should ensure lone working is considered during risk assessment and that appropriate systems are established to ensure the health and safety of employees in these circumstances.

The Estates Representative and or School Contract Coordinator should be informed when the individual concerned arrives and leaves site. Reporting lines will be agreed before work starts, to ensure compliance with emergency arrangements.

16.3 Personal Protective Equipment (PPE)

Contractors shall supply their employees with all appropriate PPE and ensure that their employees use it correctly as required by applicable legislation and as identified in associated risk assessments.

17. ENVIRONMENTAL

The University's environmental policy is aimed at ensuring that relevant environmental legislation is complied with and that the protection of the environment is enhanced by keeping impacts to a minimum in a sustainable, financially rewarding and technically feasible manner.

17.1 Refrigerant Gases (CFCs)

CFCs must be collected in specially sealed cylinders by a licensed disposal company. Do not allow CFCs to be released into the atmosphere, as they are strong ozone depleting agents. Contractors could be fined for deliberately releasing CFCs.

17.2 Air Quality

Dust can cause nuisance and health problems for workers and others on the campus. If the activities to be carried out are likely to generate dust ensure materials and stockpiles that are likely to generate dust are covered. Place any sweepings in a bag or box before putting them into a bin/skip to prevent dust becoming airborne.

Many solvent chemicals release polluting vapours when containers are opened; this also presents a fire hazard. Always seal solvent containers with a tight lid; use water based or biodegradable products, strippers and cleaners wherever possible. See 'solvents'.

17.3 Water Pollution

It is against the law to place any material (other than clean water) in a position where it is likely to leak, fall or be blown into any drain or gutter that is used to receive rainwater. Allowing this to occur can result in fines or legal proceedings against a business or individual, regardless of whether the pollution was intentional or not.

Keep footpaths, drains, gutters, etc around the work site free of litter, soil and sand, particularly at the close of each working day. Do not sweep litter, leaves or anything else into drains or gutters. Never hose rubbish, soil, sand or leaves (or anything else) into drains or gutters. Keep rubbish bins covered and emptied regularly and keep a spill kit close by.

See also 'hazardous substances'.

17.4 Noise Nuisance

The contractor shall take all practicable precautions to minimise noise resulting from his activities. All equipment used in the performance of the work shall be fitted with effective silencers of a type as recommended by the equipment manufacturer. All tools and silencers shall be kept in first-class condition at all times. Operators of such equipment shall be closely supervised to ensure that the silencers are always in place while the tools are being used. Loud hailers shall not be used.

APPENDIX 1 PERMITS TO WORK

ESS currently operates the following permits to work.

Permits to Work

Confined space working

Fume cupboards that utilise cyanide

Fume cupboard working

Hot work

Lift isolation

Roof access

Work on chemical drains

In addition the following documents are to be used as appropriate

Access Control for Plantrooms, Risers and Roof Areas

Contractors work in duct access document

Electrical test certification

Electrical isolation certificate

Gas welding equipment certificate.

Lift maintenance checklist

Mechanical isolation certificate

Pasteurising document

Walk in duct access document