

University of Manchester

School of Electrical and Electronic Engineering

Safety Policy

Version 6.0

30.11.10

Full PDF Document is available for download
<http://www.eee.manchester.ac.uk/eee-net/>

Contents

	Page
1 POLICY STATEMENT	4
1.1 University Policy Statement	4
1.2 School Policy Aims	4
2 ORGANISATION AND RESPONSIBILITIES	5
2.1 Structure	5
2.1.1 Abbreviations	5
2.1.2 Codes of Practice	5
2.2 Staff Responsibilities	5
2.3 Group Safety Coordinators	6
2.4 Research Groups	6
2.4.1 Academic Supervisors	7
2.5 Radiological Protection Supervisors	7
2.6 School Safety Advisers	7
2.7 School Health and Safety Committee	8
2.8 Head of School	8
2.9 Inspections and Review	8
2.9.1 Training	8
3 GENERAL ARRANGEMENTS	9
3.1 Fire Safety	9
3.1.1 Building Representatives	9
3.1.2 Alarm System	9
3.1.3 Alarm Testing	10
3.1.4 Annual Evacuation Practice	10
3.1.5 Personnel with a Physical Disability	10
3.2 Other Emergencies	10
3.3 First Aid	10
3.4 Accidents	11
3.5 Non School Staff	11
3.5.1 Visitors	11
3.5.2 Child Protection and Criminal Records Bureau Disclosures	11
3.5.3 Sub-Contractors	12
3.6 Lone Working and Out-Of-Hours Working	12
3.7 Slips, Trips and Falls	12
3.8 Smoking	12
3.9 Buildings	12
4 PARTICULAR ARRANGEMENTS	13
4.1 Risk Assessments	13
4.2 Manual Handling	13
4.3 Display Screen Equipment	13
4.4 Electrical Safety	13
4.4.1 Basic Installation	13
4.4.2 Portable Appliances	14
4.4.2.1 Non University of Manchester Property	14
4.5 Chemical Safety	14
4.5.1 Hazardous Waste	14
4.6 Specialist Equipment	14
4.6.1 Pressure Vessels	15
4.6.2 Fume Extraction Equipment	15
4.6.3 Cryogenic Vessels	15
4.6.4 Lifting Equipment	15
4.6.5 Ladders	15
4.6.6 Gas Regulators & Cylinders	16
4.6.7 Lasers	16
4.6.8 X-ray Equipment	16
4.7 Workplace	16
4.7.1 Hazards	16

4.7.2 Laboratories	16
4.7.3 Clearance Certificates	17
4.8 Safety Signs	17
4.8.1 Permits to Work	17
4.9 Work Equipment	17
4.9.1 Personal Protective Equipment	18
5 APPENDICES	19
Appendix 1 Management Structure for Health & Safety	20
Appendix 2 School Health and Safety Committee	21
Appendix 3 Individuals with Safety Responsibilities within the School	23
Appendix 4 School Safety Procedures for Student Supervision	24
Appendix 5 School Areas of Potential Hazard (Workshops, Laboratories, Etc)	25
Appendix 6 Evacuation of personnel with a physical disability.	27
Appendix 7 Application Form "Out of Hours" Permit	28
Appendix 8 Laboratory Clearance Certificate	29
Appendix 9 Safety Coordinator Short Form Report	31
Appendix 10 School Risk Assessment Form	32
Document Control Box	34

1 POLICY STATEMENT

1.1 The University Health and Safety Policy Statement.

The University's Health & Safety Policy and associated Procedure set out the principles of how health and safety is managed across the University. Both are approved by the Board of Governors, and satisfy a specific legal requirement. Responsibilities of heads of faculties, Schools and directorates are described in the Procedure, and should assist in the development of local health and safety policy statements, which explain the local organisation and arrangements for managing health and safety. Each School must additionally prepare its own safety policy statement explaining how safety is managed.

View the [University health & safety policy statement](#)

1.2 School Aims

This School provides such information, training and supervision as needed to maintain safe and healthy working conditions, equipment and systems of work for all its employees and students. The School also has a duty of care towards the health and safety of other people who may be affected by its activities. This includes visitors, those attending emergencies (*police, fire, ambulance, etc*) and contractors.

It is the aim of this School to comply with University of Manchester's general Health and Safety Policy Statement ([see section 1.1](#)), the minimum requirements of appropriate legislation, including the **Health and Safety at Work Act 1974**, ([view online](#)) **The Management of Health and Safety at Work Regulations 1999** ([view online](#)), ([amended 2003](#)). The School aims to implement the Health and Safety Executive guidance found in **Successful Health and Safety Management HSG65**. ([view online](#)).

In addition the School aims to operate inline with approved codes of practice, also manage safety as a core function of its business and seeks to achieve "good practice" standards wherever it is reasonably practicable. The organisation, responsibilities, general and particular arrangements for ensuring effective safety management systems, including training, consultation and involvement of employees, effective planning, monitoring and reviewing of this policy as well as to provide the resources required to implement safe working systems and practices.

Signed:  Head of School,
Prof. A Gibson

Date: 30-11-2010

NOTE: This POLICY Supersedes All Previous Revisions

2 ORGANISATION AND RESPONSIBILITIES

2.1 Structure

The School health and safety management structure is shown in [Appendix 1](#). This diagram clearly shows those post holders who have a specific role with safety duties and those who give advice on health and safety within the School.

2.1.1 Abbreviations

All abbreviations have now been removed throughout this document.

2.1.2 Codes of Practice

The University of Manchester codes of practice, referred to in this document offer essential guidance and best practice and are available in PDF format from the University Health & Safety Services web site : - <http://www.campus.manchester.ac.uk/healthandsafety/CoPs&Guidance.htm>

2.2 Staff Responsibilities

Health & Safety Law, What you should know ([view online](#)).

All employees have a legal responsibility to;

- Co-operate with those members of staff having special safety duties to achieve a healthy and safe workplace, refer to [appendix 2](#)
- Comply with this and other University of Manchester health and safety policies,
- Report any condition which they consider to be a health and safety risk to their supervisor, Director of Studies, Group Safety Coordinator(s) ([see section 2.3](#)), Group Leader or School Safety Adviser(s),
- Take reasonable care of themselves and others,
- Ensure that they do not interfere with or misuse anything provided in the interest of health, safety and welfare and
- Where they encounter a situation which in their view is unsafe, not to proceed until the hazard has been sufficiently controlled.

It is the responsibility of the member of staff supervising any activity in the School to ensure that an appropriate risk assessment ([see section 4.1](#)) is carried out for both that activity and for the area in which the activity is being undertaken.

It is the responsibility of all members of the School, staff, students and visitors are to ensure so far as is reasonably practicable that safety procedures are observed and standards maintained. In practice students are responsible to their supervisors and visitors to their sponsors.

- It is a requirement that all new staff, students and visitors attend a "General School" safety induction and a "Group Specific" safety induction which will focus on the specific hazards and control measures that have been established locally, the individual should sign a statement to that effect and a copy sent to a School Safety Advisor. Without this they should not proceed.
- Within the Institute, safety advice and information are available from the Faculty Safety Coordinator (Mr Andrew Pollitt) and more particularly, North West Medical Physics for radiological monitoring ([see section 2.5](#)), ([View their web site](#)).
- The School Safety Policy, will be issued to all new staff at induction and made available online to all staff and students, the policy will be updated on a continuous basis by the School Health & Safety Committee ([see section 2.7](#)) and the updated version lodged with the School Safety Advisers, Head of School and Faculty Safety Coordinator.

2.3 Safety Coordinators, research group, technical and administrative

Each of the School's groups has a Group Safety Coordinator(s), ([see Appendix 2](#)). The role of the Group Safety Coordinator(s), for which they will receive formal training, is as follows: -

- First contact for distribution and supply of relevant information from and to the School Safety Adviser(s) and the chair of the School Safety Committee.
- To be a facilitator of information by providing specialist information or by providing referral to specialist sources and to request formal, informal and legislative information from the School Safety Advisers and Faculty Safety Coordinator. The role of the Group Safety Coordinator(s) to provide information does not lessen the responsibilities of the immediate supervisor for the project, process, work area or person experimenting/working.
- To advise the Group/area Leader concerning the development of expertise within the group so that they can ensure it is compliant with the safety regulations relevant to their operations and ensure appropriate levels of competency.
- To assist the group in implementing and then auditing all necessary procedures and practices, maintaining a register of all risk assessments.
- To be available to accompany the School Safety Adviser around their group on annual School safety inspections ([see section 2.9](#)) and to assist the Group/area Leader in ensuring completion of any resulting actions.
- To regularly check for the presence of safety equipment (*first aid kits, fire extinguishers, etc*) as relevant to their group/area practices and identified needs, informing the Schools Laboratories & Facilities Manager where appropriate.
- To attend the Schools Health & Safety Committee meetings, submitting a standard short form report ([see Appendix 9](#)) generated from the respective research, technical or administrative group meetings. Note. This report process is aimed at presenting information to the safety committee in a standard form, the format and content is a draft and will be modified following continuous feedback to the Chair of the Safety Committee.

2.4 Research Groups

The primary responsibility for the management of health and safety within the research groups rests with the Group Leader who is responsible for ensuring that all members of academic and academic related staff within his group are competent, implement this policy and carry out risk assessments ([see section 4.1](#)).

Any problems should be reported to the appropriate School Safety Adviser. Additionally, problems should be brought to the attention of the Group Safety Coordinator(s) who can refer back to the Group Leader, School Safety Adviser, Trade Union Safety Representative or ultimately the Faculty Safety Coordinator.

2.4.1 Academic Supervisors

The health and safety management of research projects is delegated to research supervisors; this is assumed unless an alternative arrangement is agreed with the Head of School and written down as part of the research documentation. Details of academic supervisory responsibilities are detailed in the University Health & Safety Policy section [Organization & arrangements : line management](#).

Where academic activities are shared across multiple locations or research groups, the Principle Investigator shall retain ultimate responsibility for health and safety, ensuring all appropriate risk assessments are undertaken and staff possess the appropriate levels of knowledge skill and competence.

Where arrangements are made for academic visitors to work in the School, the academic sponsor must ensure appropriate arrangements are identified and implemented with the use of a suitable and sufficient risk assessment.

Supervisors of students should have regard to the University of Manchester's code of practice and the School's own procedures for supervising students; these are listed in [Appendix 4](#).

Students who follow the School qualification "With Industrial Experience" (WIE), must receive suitable safety instruction prior to the start of any placement, the School adheres to the Health and Safety Guidance for the Placement of HE Students.

2.5 Radiological Protection Supervisors

An [ionising radiation](#) Radiological Protection Supervisor, ([see Appendix 2](#)), has been appointed by the School, the primary tasks of the Radiological Protection Supervisor is to

- Provide advice and guidance to all employees and students on health and safety matters related to radiological equipment.
- To ensure that all users of X-ray equipment are monitored.
- To advise users on appropriate safety legislation for X-ray equipment.
- To maintain a register of equipment and users

For a full list of responsibilities see: -

http://www.campus.manchester.ac.uk/healthandsafety/h&s_policy_current/A6_rps.pdf

In addition the School has appointed a [non-ionising radiation](#) Protection Supervisor or Laser Safety Advisor, the primary tasks of the Laser Safety Advisor is to: -

- To maintain a register of all lasers (Class III and above).
- To ensure that all laser users are registered, trained and undergo health surveillance.

For a full list of responsibilities see: -

http://www.campus.manchester.ac.uk/healthandsafety/h&s_policy_current/A6_iso.pdf

2.6 School Safety Advisers

Two School Safety Advisers, ([see Appendix 2](#)) are appointed by the School (one for the Sackville Street Building and one for the Ferranti Building). The responsibilities and duties of the School Safety Adviser are described fully in [Appendix 6](#) of the University of Manchester safety policy statement. The primary tasks of the School Safety Adviser(s) are to provide advice and guidance to all employees and students on health and safety matters as follows: -

- To investigate accidents, incidents and complaints.

- To undertake workplace safety inspections and ensure that remedial action is taken where required.
- To disseminate safety information from the Faculty Safety Coordinator to the appropriate people within the School.

Note: The School Safety Advisers are not responsible for carrying out risk assessments ([see section 2.4](#)) but will advise research groups, teaching laboratories, technical services and administrative groups and buildings support services on how to go about this task as appropriate.

2.7 School Health and Safety Committee

The membership of School Health & Safety Committee is shown in [Appendix 2](#). This committee is directed by the Head of School to ensure that a safe and healthy working environment is maintained for all employees and students. Specifically, its purpose is to examine all aspects of new legislation, to examine the adequacy of present procedures and practices, to consider new ideas for improvement and to address all problems and difficulties related to health and safety. The School Health & Safety Committee reports to the Head of School annually and the School Board periodically. Normally, meetings take place three times per year, two weeks in advance of the School Academic Board. Urgent matters are accommodated by convening a special meeting of the Schools Health & Safety Committee. The committee structure and activities are based upon [University guidelines](#).

2.8 Head of School

The ultimate responsibility for health and safety within the School rests with the Head of School who is also responsible for implementing this policy. A full list of responsibilities are available under [Organisation & arrangements: line management](#), contained within the University's Health and Safety Policy.

2.9 Inspections and Review

The Schools Health & Safety Committee will arrange for inspections of the workplace once per year. The inspection will be carried out by the School Safety Advisers, the appropriate Group Safety Coordinator(s) and the Trade Union Safety Representative and the results reported to the Schools Health & Safety Committee. A list of recommendations arising from the inspection will be sent to the Group Leader for action, and copied to the Head of School, the Chair of the School Health & Safety Committee, who will pursue the Group Leader for actions before the next meeting of the Schools Health & Safety Committee. Any non-response will be discussed at the School Health & Safety Committee and brought to the attention of the Head of School. Simple problems will be resolved within the groups by the Group Safety Coordinator(s). If improvements cannot be allocated the necessary resource, appropriate steps must be taken to adequately control any risks in the short term. The Group Leader will inform the Head of School and the Chair of the School Health & Safety Committee of the actions taken.

At the end of each academic year, at a meeting with the Chair of the Schools Health & Safety Committee, the Head of School will review its work and monitor the progress of any outstanding safety work. In addition the Faculty Safety Coordinator also organises independent safety monitoring audits of Schools.

2.9.1 Training

Suitable health and/or safety training will be provided for any member(s) of staff when and where appropriate and where identified in risk assessments. Risk Assessment training is compulsory for any member of staff who has involvement in writing or generating assessments. Regular training sessions are organised by the University Staff Development and Training Unit.

3 GENERAL ARRANGEMENTS

3.1 Fire Safety

Fire is an ever present hazard that affects everyone (staff, students, visitors, etc) within the School. Although the risk of a fire starting in our offices is very low, the risk of a fire starting within some of our other work areas (laboratories, workshops, etc) is increased by the presence of flammable (chemicals, solvents, oxygen, etc) substances. Everybody should make every effort to prevent a fire occurring by reporting any known fire hazards (accumulated combustible material, electrical faults, illegal smoking, etc). Fire risk assessments must be undertaken where there is an increased risk.

3.1.1 Building Representatives

The School has appointed a number of Building Representatives ([see Appendix 3](#)). The Building Representatives have a specific role to play in an emergency evacuation and they wear orange high visibility tabards. Any problem during an evacuation (real or practice) should be reported to a Building Representative or the Schools Safety Advisers, who wears a yellow high visibility tabard.

3.1.2 Alarm System

University of Manchester functions with one or a two stage alarm system which can either be activated automatically from heat/smoke sensors located around the building or manually from strategically placed "break glass upon discovering a fire" switches.

When the 1st stage alarm is initiated, everyone should be alert and prepared to evacuate the building if necessary. Everyone would be advised to check in the corridor to ensure that they are not in any imminent danger (smoke, flames, fumes, etc). This stage should also be used to "make safe" any experiments (turn heat sources off, etc) should it subsequently be necessary to evacuate the building.

When the 2nd stage alarm is initiated, everyone **MUST** evacuate the building by the nearest exit in an orderly fashion and without using the lift(s). Everyone should assemble on the designated evacuation area(s) as indicated on the evacuation notices within the corridors and should **NOT** re-enter the building until authorised by the Schools Safety Advisor or attending Fire Brigade Fire Officer.

Within the School there are two separate and distinct alarm systems for the Sackville Street and Ferranti Buildings respectively as follows: -

Sackville Street Building:	1st stage alarm:	Intermittent (on, off, on, off) Electronic Sounder
	2nd stage alarm:	Continuous Electronic Sounder
Ferranti Building:	Single stage alarm:	Continuous Electronic Sounder

Ferranti Building has a single stage fire alarm system. Upon hearing the alarm, a continuous electronic sounder, everyone **MUST** evacuate the building immediately.

3.1.3 Alarm Testing

The alarm system is tested weekly by a member of staff from the Estates Department. No action is necessary by this School, although anybody experiencing difficulty in hearing the alarm should notify their immediate supervisor, Building Representative or Schools Safety Advisor. The alarm testing times for the Sackville Street and Ferranti Buildings respectively are as follows: -

Sackville Street Building:	1st stage alarm:	Every Wednesday morning (08.45).
	2nd stage alarm:	Every Sunday morning (no precise time).
Ferranti Building:	Singles stage alarm:	Every Wednesday afternoon (15.05)

3.1.4 Annual Evacuation Practice

An annual evacuation practice is carried out by the Faculty Safety Coordinator. These practices are timed and all records are archived. An annual report is made to the University of Manchester Standing Sub-Committee on Safety and Environmental Health. These reports can be found in the Committee papers and the Schools Safety Advisor has copies.

3.1.5 Personnel with a Physical Disability

Any person who has difficulty responding to an emergency evacuation situation should discuss this with the Schools Safety Advisers. New members of staff are asked this specifically on induction. Special arrangements for the evacuation of wheelchair users, deaf or partially deaf and blind or partially sighted personnel is covered in [Appendix 6](#). Advice is always available from the Schools Safety Advisers or Faculty Safety Coordinator. Evacuation of personnel with a physical disability is detailed in University of Manchester's code of practice "[Emergency evacuations](#)".

3.2 Other Emergencies

Very occasionally the fire alarm system will be used for other emergencies (bomb alert, gas leak, etc). In such situations, the occupants should respond in exactly the same way as for a fire evacuation. Further details about re-entering the building will be given by the Schools Safety Advisers, Faculty Safety Coordinator, police and/or other emergency authorities.

3.3 First Aid

Several staff in each building are trained to be first aid responders (normal working hours only) and their contact details can be found on the green notices installed by each building exit. Contact details are also provided in the School safety induction pack. Basic first aid is also provided by the security staff (out of hours also) who can be contacted on Ext: **64999**. First Aid advice is available on the University H&S services web pages. <http://www.campus.manchester.ac.uk/healthandsafety/firstaid.htm>

The contents of all First Aid boxes are checked and kept up-to-date by Mr Simon Hayes, Technician Ext: 64767.

3.4 Accidents

All accidents/incidents/near misses are to be reported to the School Safety Advisers as soon as possible, reports are seen by the Head of School and the Trade Union Safety Representative (notified by the Schools Safety Adviser) and investigated as appropriate. Accident reports are returned to Health & Safety Services, Waterloo Place, for collation, study and, if necessary, further investigation. The School copy of an accident report is kept by the Schools Safety Advisers. Some accidents and dangerous occurrences must be reported to the Health and Safety Executive; this is done by the Faculty Safety Coordinator in consultation with the School.

If, while you are on the premises, you see anything which you think is unsafe you should tell your supervisor or one of the Schools Safety Advisers.

A copy of the University accident reporting form can be downloaded from the following link. <http://www.campus.manchester.ac.uk/healthandsafety/CoPs&Guidance/AccidentReportForm.doc>

3.5 Non School Staff

Any question of health or safety should be addressed to the immediate supervisor (if a student) or sponsor (if a visitor) who can make the necessary further enquiries.

3.5.1 Visitors

Any visitors invited by members of staff are the responsibility of that staff member who should ensure they have the necessary safety information. All adults visiting students in laboratories should be invited by a member of staff, who will be responsible for their safe conduct.

3.5.2 Children, Child Protection and Criminal Records Bureau Disclosures

The law defines a child as being any person under the age of 18. As part of its normal activities the University engages with children regularly on and off its premises. The University is committed to ensuring that children remain safe in all their dealings with the University.

The School complies with University of Manchester's code of practice "[Children on campus](#)" and therefore young children are banned from the School premises. The only exception being the briefest visit. Even in those circumstances, the Group Leader should be informed and the children would need to be supervised at all times. This does not preclude a group of children visiting the School as part of an authorised tour or party.

Where undergraduate students, visitors and [young people](#) on [work experience](#) are under the age of 18 years, an appropriate risk assessment must be carried out and appropriate guidelines for child supervision are to be identified. Where Staff have no alternative but to supervise young people on a 1:1 basis, that member of staff must obtain a full disclosure from the Criminal Records Bureau. Please contact the office for [Compliance and Risk](#) on the following phone number 0161 275 5798 for advice.

The University of Manchester (Draft) Child Protection Policy and Guidance Document states in section 3.5.

“All members of University staff involved in activities involving extensive contact with children must have undergone an enhanced disclosure from the CRB and they will have responsibility for making judgements with regard to the need for disclosure for others involved in the activities they are leading”.

The University office for Compliance and Risk is responsible for Child protection matters; a child protection policy is currently being developed and exists in draft form, this policy will be made available on line when published.

3.5.3 Sub-Contractors

Where a sub-contractor (instrument repair/calibration engineer, sales representative/engineer, etc) is accompanied at all times, the member of staff they are visiting is responsible for ensuring they have the necessary safety information.

Where a sub-contractor (carpet fitter, heating service engineer, equipment installer, etc) is working alone, unsupervised by a member of School staff, the sub-contractor must be made aware of the University of Manchester safety systems (fire alarm annunciation, occupational health, security, etc) and also of any potential hazards (chemicals, pressurised gases, lasers, etc) within the area where they are working. All relevant risk assessments should be made available. The responsibility for disseminating this information lies with those who introduce the sub-contractor.

3.6 Lone Working and Out-Of-Hours Working

Supervisors of students should have regard to University of Manchester's code of practice "[Lone working](#)". Lone working out-of-hours in a laboratory environment is **NOT** permitted within the School without written permission from the supervisor. Lone working in the laboratories of Ferranti Building is not permitted at ANY time. Out-of-hours access to the School will be subject to the prevailing University of Manchester regulations and, before a permit is granted, the School requirements must be fulfilled. Application forms and records are kept by the Laboratories & Facilities Manager ([see Appendix 7](#)).

3.7 Slips, Trips, and Falls

Any trips, slips or falls should be reported to your supervisor and to the respective School's Safety Advisor for the building you are in. If any of these problems have been caused by an obvious hazard, then the person responsible for that area should be informed and corrective action taken to remove or minimise the hazard using normal procedures.

3.8 Smoking

University of Manchester's code of practice "Smoking" has been fully adopted by the School. No provision for smokers has been provided within the School.

3.9 Buildings

The system for initiating safety work starts with the School's Safety Advisers, usually following a safety inspection, who then notifies the responsible body for carrying out this work. Monitoring of the work is carried out by the School Health & Safety Committee, and reviewed at the year end by the Head of School.

4 PARTICULAR ARRANGEMENTS

4.1 Risk Assessments

For the School to comply with the **Management of Health and Safety at Work Regulations 1999**, risk assessments must be "Suitable and Sufficient" and carried out for each area of work and for all tasks and projects that involve any level of risk to personal health and safety. They should be undertaken by the "Competent person(s)" responsible for the area/project and all others associated with the area and/or project. Risk assessments are an essential part of University of Manchester policy and Health and Safety Executive legislation. It is the responsibility of the person in charge of an area/project to ensure that a risk assessment is carried out (e.g. in the case of a research project, the academic principal investigator; in the case of a teaching laboratory experiment, the academic running/supervising the laboratory experiment). It is also the responsibility of the person producing the risk assessment to communicate the findings to those who could be potentially affected by the activity. [School of E&EE Risk Assessment Template](#). [University Guidance document](#).

4.2 Manual Handling

If manual handling is a regular or repetitive part of a job, then a risk assessment ([see section 4.1](#)) must be carried out in accordance with the **Manual Handling Operations and Regulations 1992**. [Guidance](#) is available in an Health and Safety Executive document (ISBN-0-7176-2415-3). Training for manual handling is available from Occupational Health. Simple information is available from Schools Safety Advisers.

4.3 Display Screen Equipment

The Health and Safety (Display Screen Equipment) Regulations 1992 require the School to identify "users" and assess their working practices and environment (lighting, eye tests, location, rest periods, etc). The School has trained staff to carry out these assessments. The outcomes of such assessments are the responsibility of the individual, the School (optical eye tests) and the group (workstation location and/or positioning). Assessments are arranged and records are kept by Mr Tony Mulryan of the Information Systems Support Group. ([see appendix 3](#)).

4.4.1 Electrical Safety

The School has a duty to comply with the **Electricity at Work Regulations 1989** and to maintain all electrical equipment in a safe condition as faulty electrical equipment can cause death or serious injury by electric shock, burns and fire.

4.4.2 Basic Installation

This covers the main wiring within the building up to the point of local isolation and is maintained by the Estates Department as part of the building fabric. Routine examinations at preset intervals are undertaken based upon age and general condition.

Individuals who find faulty or dangerous wiring problems associated with the fixed wiring installations should report them to the Estates Department as follows: - Estates Help Desk, **Ext 52424 and 68888**

4.4.3 Portable Appliances

For the School to comply with Health and Safety Legislation, it is essential for all portable appliances including those built at University of Manchester to be checked and tested on a regular basis. The School carries out Portable Appliance Testing in accordance with university [guidelines](#) and maintains a database of all such equipment. Checks and tests are carried out at regular intervals.

High risk portable appliances (soldering irons, power supplies, electric drills, kettles, etc) are checked and tested annually, lower risk items like computer workstations, which are classed as semi-permanent fixtures, are checked and tested every four (4) years.

All portable appliances, including separate mains cables, which have been checked and tested, are clearly labelled.

The School has trained staff to carry out portable appliance testing.

4.4.3.1 Non University of Manchester Property

The School has a duty to ensure that all portable appliances are safe and therefore any equipment (kettles, laptop power packs, etc) brought into University of Manchester by staff, students or visitors for use at work must be fully checked and tested. If for any reason an individual refuses to allow his personal electrical equipment to be checked and tested, then that equipment must be removed from University of Manchester property immediately and permanently.

4.5 Chemical Safety

Dangerous and flammable substances are used and stored in several laboratories and workshops throughout the School. Usage and storage must comply with the Health and Safety Executive regulations on the **Control of Substances Hazardous to Health Regulations 1999 (COSHH)**. Information on the location of all such materials must be made available to the Fire Brigade via the building floor plan compiled by the Faculty Safety Coordinator and School Safety Advisers, ([see Code of Practice](#)).

Where chemicals are to be used then an assessment of the risk must be carried out and the findings communicated to those who could potentially be affected.

4.5.1 Hazardous Waste

All chemical waste must be disposed of via a licensed disposal company; please contact Mr Mal McGowan for assistance, a record of all disposals must be maintained, ([see University Code of Practice](#)).

4.6 Specialist Equipment

The School has a large amount of specialized equipment that must comply with various Health and Safety legislation as outlined in the following sections.

4.6.1 Pressure Vessels

The School is required to maintain a register of all pressure vessels for insurance purposes. Members of staff should ensure that the Laboratories & Facilities Manager is informed of all such equipment so that the appropriate inspections, tests and maintenance procedures are undertaken by the School's support staff in compliance with Health and Safety Executive regulations and insurance requirements. Estates Department keep a central University of Manchester register of pressure vessels and notify Schools when insurance inspections are required.

4.6.2 Fume Extraction Equipment

Measurements of air flow across the face of fume cupboards are taken by the School's Test and Inspection Team at regular intervals (usually every twelve months). Results are recorded on a label attached to the fume cupboard. Estates Department are responsible for keeping a central register of fume extraction equipment and doing regular checks on the fans and ductwork. Members of staff are responsible for ensuring fume cupboards are in correct working order for their use and reporting any problems.

4.6.3 Cryogenic Vessels

The School has two-bulk liquid nitrogen storage facility supplying Sackville Street Building and uses liquid nitrogen Dewar's within the Microelectronic and Nanostructures (M & N) research group. Liquid helium is also used by the M & N group. The School maintains a register of liquid nitrogen vessels and these are inspected and maintained by the School's Test and Inspection Team in compliance with Health and Safety Executive regulations and insurance requirements. Estates Department keep a central University of Manchester register of pressure vessels, including liquid nitrogen, and notify Schools when insurance inspections are required. Members of staff are responsible for ensuring that liquid nitrogen is used in a safe and controlled manner according to Health and Safety Executive regulations. Special note should be taken of the hazards associated with using liquid nitrogen in terms of cryogenic burns and more particularly, oxygen depletion. A register of trained and authorised users to use the liquid nitrogen storage tanks is maintained by the Laboratories and Facilities Manager.

4.6.4 Lifting Equipment

A comprehensive listing of all School certificated and inspected lifting equipment is held by the Laboratories & Facilities Manager, [see Appendix 3](#). Estates Department keep the central University of Manchester register for lifting equipment above the hook and are responsible for planning regular external inspections. Whilst Estates are responsible for the maintenance of fixed beam equipment, the School has responsibility for the maintenance and use of all other lifting equipment below the hook. Staff should ensure that only correctly certified and inspected equipment is used and any new equipment is registered with the Laboratories and Facilities Manager, only competent trained staff are to operate the School overhead cranes.

4.6.5 Ladders

All ladders used and stored in the School must comply with the University of Manchester, Health and Safety Services policy. Advice on the correct use of ladders is available from the Health and Safety Executive [Guidance Note](#). A safe system of care, maintenance and storage for all ladders is used within the School. Periodic inspections and maintenance of all ladders will be undertaken by the Test and Inspection Team and records maintained by the Laboratories & Facilities Manager. An appropriate risk assessment and training must be carried out before using any ladders. All ladders must be checked before use to ensure they are safe to use.

4.6.6 Gas Regulators & Cylinders

All gas regulators and cylinders used in the School should be checked as suitable and safe for the intended operation. A listing of gas regulators approved for the appropriate use is held by the Laboratories & Facilities Manager. A twelve monthly check of location, usage and tag numbers is made by the School's Test and Inspection Team and changes recorded. A periodic external check of condition and calibration is required to meet Health and Safety Executive regulations. It is the responsibility of all staff to ensure that processes involving gas handling are controlled by the correct equipment and protected by suitable devices (relief valves, bursting discs, etc). Only trained people should handle gas regulators and cylinders.

4.6.7 Lasers

All lasers used in the School are listed in a School register held by the [Laser Safety Advisor](#). Anybody using laser equipment must contact the Laser Safety Advisor who will arrange for an eye test and approve the installation. The Advisor can also advise on the appropriate safe working practices for using different classes of lasers. ([See section 2.5](#))

Refer to <http://www.campus.manchester.ac.uk/healthandsafety/laser.htm>

4.6.8 X-ray Equipment

All X-ray equipment used in the School is listed in a School register held by the [Radiological Protection Supervisor](#). Advice and information on using X-ray equipment can be obtained from the Protection Supervisor who can also advise on the necessary monitoring of personnel. ([See section 2.5](#))

Refer to <http://www.campus.manchester.ac.uk/healthandsafety/radiation.htm>

4.7 Workplace

The **Workplace (Health, Safety and Welfare) Regulations 1992** ([view online](#)) require employees to provide and maintain reasonable standards of heating, ventilation, lighting and cleanliness. The School recognises that all aspects can have an impact on well-being and welfare and will strive to achieve reasonable standards at all times.

Full workplace safety inspections are carried out every 12 months. These are initiated by the Schools Safety Advisers who should be accompanied by the appropriate Group Safety Coordinator(s) and union representative. Inspection of undergraduate workspaces would include the Director of Studies / Head of School Administration in place of the Group Safety Coordinator(s).

4.7.1 Hazards

Any new significant hazard that is to be introduced into the School **MUST** be reported to the School Health and Safety Committee via the Group Safety Coordinator. A list of current significant hazards in the School is listed in [Appendix 5](#).

4.7.2 Laboratories

[Appendix 3](#) lists the additional School staff to which specific duties with respect to health and safety have been assigned. All staff, students and visitors to the Schools facilities must follow any local safety arrangements that are in place such as those for the High Voltage laboratories and clean rooms.

4.7.3 Laboratory clearance certification

Upon completion of a specific experiment or research contract, it is the responsibility of the Group Leader to ensure that all hazardous equipment or waste is disposed of in accordance with University guidelines, appropriate funding provision should be identified at the beginning of a project to allow for decontamination. Following clean up and disposal process, a clearance certificate must be issued which will identify any residual risk; this certificate should then be submitted to the Schools Laboratories and Facilities Manager who will then report any residual risk to the School Safety Committee, [see appendix 8](#).

4.8 Safety Signs

These are provided to warn people of risks where existing controls cannot completely remove the hazard. When they are provided by the School, they must comply with the appropriate legislation - **Health and Safety (Safety Signs and Signals) Regulations 1996**.

Apart from the normal fire exit signs within the corridors which are provided and maintained by the Estates Department, this School also provide many other safety related signs (lasers, flammable chemicals, oxidising chemicals, eye protection, strong magnetic field, etc).

If a risk assessment identifies the need for other warning signs, advice should be sought from the Schools Safety Advisers or ultimately the Faculty Safety Coordinator.

<http://www.arco.co.uk/browse/Workplace/Signs/Safety%20Signs>

4.8.1 Permits to Work

A permit to work system and procedure is in place in the School, this constitutes the most formal method for ensuring safe working practices and safe systems of work. The objective of a permit to work is for an experienced and authorised person to pre-assess the task to be undertaken (with any necessary technical assistance) and any hazardous circumstances involved and then prescribe in writing. Permits are only issued by the School Laboratories & Facilities Manager and Ferranti Building Laboratories Manager.

The School operates the permit to work system in accordance with the [University Guidance on Permit to work systems](#).

Permits are required when carrying out the following activities.

- Hot Works, welding cutting braising, (including works carried out by an external contractor).
- Roof Access
- Working on Live voltages exceeding 50Vac
- Working in an enclosed, confined space

4.9 Work Equipment

The **Provision and Use of Work Equipment Regulations 1999** apply to basic office items (*desks, chairs, filing cabinets, etc*) within the School as well as more complex machinery and equipment (*furnaces, lathes, lasers, etc*). see <http://www.hse.gov.uk/pubns/indg291.pdf>

All equipment brought into the university from abroad must comply with Provision and Use of Work Equipment Regulations.

4.9.1 Personal Protective Equipment

The School complies with the **Personal Protective Equipment at Work Regulations 1992** and will provide all personal protective equipment (footwear, gloves, goggles etc), as necessary and identified in the appropriate risk assessment, all PPE must be used in accordance with local instructions, or as recommended by Occupational Health. All PPE requirements must be identified in the risk assessment covering the work activities.

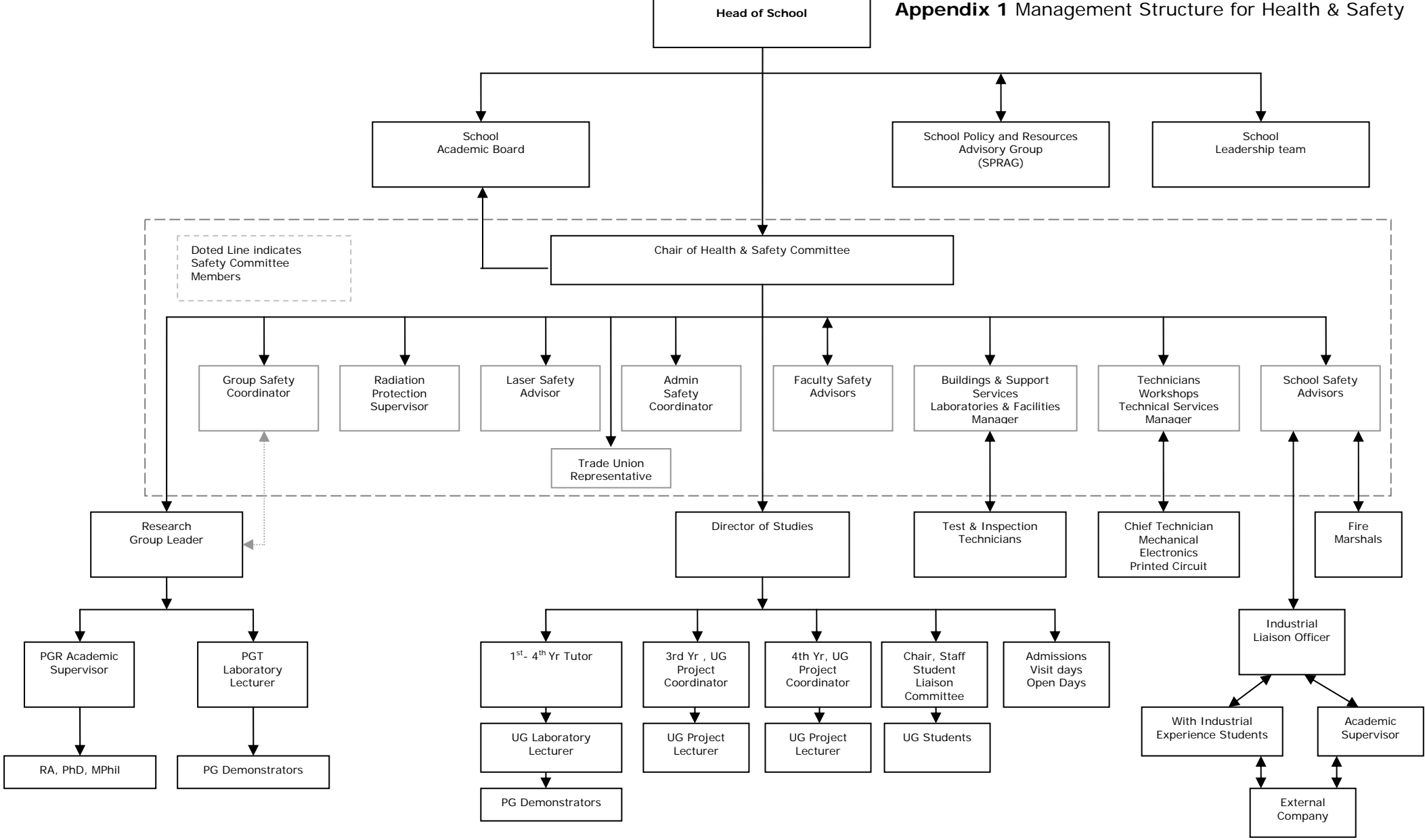
<http://www.hse.gov.uk/pubns/indg174.pdf>

Prior to working with lasers, people must go through the appropriate Occupational Health examination and registration procedure.

5 APPENDICES

- Appendix 1** [Management Structure for Health & Safety](#)
- Appendix 2** [School Health and Safety Committee](#)
- Appendix 3** [Individuals with Safety Responsibilities within the School](#)
- Appendix 4** [School Safety Procedures for Student Supervision](#)
- Appendix 5** [School Areas of Potential Hazard \(Workshops, Laboratories, Etc\)](#)
- Appendix 6** [Evacuation of personnel with a physical disability.](#)
- Appendix 7** [Application Form "Out of Hours" Permit](#)
- Appendix 8** [Laboratory Clearance Certificate](#)
- Appendix 9** [Safety Coordinator Short Form Report](#)
- Appendix 10** [School Risk Assessment Form](#)

Appendix 1 Management Structure for Health & Safety



APPENDIX 2
School Health and Safety Committee

Chairman:	Vacant
School Safety Advisers:	Vacant (Sackville Street Building) Mr F J Hogan (Ferranti Building) Francis.J.Hogan@manchester.ac.uk 0161 306 4805
Laser Safety Advisor:	Dr M Halsall matthew.p.halsall@manchester.ac.uk 0161 306 3184 Dr R Sloan
Radiological Protection Supervisor:	rob.sloan@manchester.ac.uk 0161 306 4640
Laboratories & Facilities Manager:	Mr M Ash M.Ash@manchester.ac.uk 0161 306 4759
Union Representative:	Vacant (UNITE)
Faculty Safety Coordinator:	Mr A W Pollitt A.Pollitt@manchester.ac.uk 0161 306 4006
Administrative Staff Safety Coordinator	Mrs G Lent Gillian.Lent@manchester.ac.uk 0161 306 4703

APPENDIX 2

School Health and Safety Committee

Mr M Ash
Technical Services Safety Coordinator M.Ash@manchester.ac.uk
0161 306 4759

Research Group Safety Coordinators

Dr Leszek Majewski
Microelectronic and Nanostructures: Leszek.majewski@manchester.ac.uk
0161-306 4758

Mr F J Hogan
Electrical Energy and Power
Systems Francis.J.Hogan@manchester.ac.uk
0161 306 4805

Dr Judith Apsley
Power Conversion J.Apsley@manchester.ac.uk
0161 306 4732

Dr Alexander Lanzon
Control Systems Alexander.Lanzon@manchester.ac.uk
0161 306 8722

Mr Keith Williams
Microwave & Communications K.Williams@manchester.ac.uk
0161 306 4653

Dr Paul Wright
Sensing, Imaging and Signal
Processing: P.Wright-2@manchester.ac.uk
0161 306 4785
Dr John Davidson,
J.Davidson-2@manchester.ac.uk
0161 306 4790

Mrs G Lent
Committee Secretary Gillian.Lent@manchester.ac.uk
0161 306 4703

APPENDIX 3

Other Individuals with Safety Responsibilities within the School

Head of School	Prof. A Gibson, andrew.gibson@manchester.ac.uk 0161 306 4703
Director of Studies	Dr C G Darkin c.darkin@manchester.ac.uk 0161 306 4710
Portable Appliance Testing: Electrical Waste Disposal	Mr Simon Hayes, Sackville, Room B28(b), simon.hayes@manchester.ac.uk Ext: 64767
Display Screen Equipment: IT Equipment Disposal	Mr A Mulryan, Sackville, Room A16(d), A.Mulryan@manchester.ac.uk Ext: 64712
Chemical Waste Disposal Advice	Mr M McGowan, Sackville, Room D19 M.McGowan@manchester.ac.uk Ext: 64745
Building Representatives,	
Sackville Building	
A-Floor:	Dr J Apsley, Room A11, Ext: 62443
B-Floor:	Mr J Bailey, Room B22, Ext: 64747
C-Floor:	Mr F McCann, Room C18, Ext: 68252
D-Floor:	Mr M F McGowan, Room D19, Ext: 64745
D-Floor:	Mr K Kahn, Room D46, Ext: 64816
E-Floor:	Mr K R Williams, Room E17(a), Ext: 64653
E-Floor:	Dr P Wright, Room E44d, Ext: 64785
F-Floor:	Dr John Davidson, Room E45a, Ext: 64790
F-Floor:	Dr E A Alsusa, Room E9, Ext: 64709
Ferranti Building	
A-Floor and C-Floor:	Mr F J Hogan, Room B22, Ext: 64805 Dr Ian Cotton Dr F Bouffard

APPENDIX 4

School Safety Procedures for Student Supervision

1. Be sure to conform to the legal requirements of the Health & Safety at Work Act, especially risk assessments, COSHH (Control of Substances Harmful to Health) and Electricity at Work regulations. **These require the Supervisor to carry out a risk assessment of every proposed project in order to identify hazards and evaluate the risks involved.** Note: Both the risk and COSHH assessments must be readily available for perusal by the Health and Safety Executive inspectors and records kept for more than five (5) years. Inform the student of these hazards and check that they are understood. Give clear instructions on the procedures to be followed. If the risks associated with the work are greater than normal for postgraduate work, or if there are any communication problems (eg with a student whose first language is not English), then written instructions should be issued.
2. Maintain regular contact with the student, including visits to the place of work. The frequency will depend upon many factors including the degree of hazard in the work, the competence, previous experience and training of the student, the working environment and contact with other workers (though note that the responsibilities of supervision cannot be delegated to technical staff, even though they may undertake some training of students, e.g. in the use of specialised equipment within their charge). Direct supervision may be necessary at times, e.g. at the start of a project or for a particularly hazardous stage, this will also allow assessment of the competency of the student.
3. Check the student's laboratory notebook. If necessary, initial the book or insert comments if unauthorised or potentially hazardous operations come to light.
4. Arrange back-up supervision if you are away. Before any absence, even for a day, satisfy yourself that the student either knows who to contact if he has a problem or has doubts about the planned work, or ensure that he is clearly instructed not to proceed if unexpected problems arise. In the latter case, you need to be confident that the student will recognise a potentially dangerous situation when confronted by it.
5. Take special care with undergraduates, for example, when they undertake project or work in a research laboratory or workshop where a member of staff is not present at all times.
6. Supervisors are responsible for the safe working practices of their students and also for making their students aware of safe working practices.
7. When postgraduate students are required to work outside normal working hours, their supervisor will complete an application for a working permit which will define the following:
 8. The student's workplace, particularly the rooms and laboratories where work is to be undertaken outside normal working hours.
 9. The working hours and period authorised in each room or area, with particular respect to the need to be accompanied.
 10. If out-of-hours working is necessary, then appropriate authorization will be given on the appropriate application form and an out-of-hours working permit will be issued and recorded by the Laboratories & Facilities Manager.
11. The School has an out-of-hours Working Permit Register held and controlled by the Laboratories & Facilities Manager.
12. Please note when making an application for Out of Hours, lone working is not permitted in laboratories unless you have a specific risk assessment signed off by the Head of School. Please refer to the following [Guidance](#) document. Lone working in the laboratories of Ferranti Building is NOT permitted at any time.
13. Supervisors should ensure oversees students, who's first language may not be English, have demonstrated a clear understanding of the work they are undertaking and any risks and control measures that have been identified.
14. Significant findings, control measures and remaining risks identified by risk and COSHH assessments must be communicated to those who could be potentially affected.

APPENDIX 5

School Areas of Potential Hazard (Workshops, Laboratories, Etc)

Room	Function	Potential Hazard
Sackville Building		
A1	Laboratory	Rotating machinery and live terminals.
A4	Laboratory	Rotating machinery and live terminals, noise
A13a	Laboratory	Compressed Gases (<i>Air, Argon, Carbon Dioxide, Nitrogen and Oxygen</i>), Assorted Chemicals and Solvents (<i>Acetonitrile [25 L]</i>).
A31	Storage	Liquid Nitrogen [2000 L]
B18	Laboratory	Rotating Machinery,
B22	Laboratory	Liquid Nitrogen
B36a	Laboratory	Optical Equipment
D1	Laboratory	Compressed Air [80psi] and Liquid Helium [100 L].
D1a	Laboratory	Solvent [50cc].
D1f	Laboratory	Liquid Nitrogen [8 L](x3).
D2	Laboratory	Compressed Air [80psi], Liquid Nitrogen [160 L] and Solvents [5 L].
D6	Workshop	Compressed Air [80psi] and Mains Gas, rotating machinery.
D7	Workshop	Compressed Air [80psi], Compressed Gases (<i>Acetylene, Argon and Oxygen</i>), Ethanol [25 L], Oil [25 L], Methylated Spirits [25 L] and Petroleum Spirit [25 L].
D8	Workshop	Rotating Machinery
D8a	Laboratory	Liquid Nitrogen [600 L].
D12a	Laboratory	Compressed Gases (<i>Ammonia, Hydrogen, Methane, Nitrogen, Oxygen and Silane</i>).
D12b	Laboratory	Liquid Nitrogen [160 L], Compressed Gases (<i>Helium and Carbon Dioxide</i>) and Hazardous Materials.
D12fab	Laboratory	Compressed Air [80psi], Poisonous Materials, Compressed Gases (<i>Helium and Hydrogen</i>), Hazardous Chemicals and Solvents [10 L].
D13a	Laboratory	Compressed Air [80psi] and Liquid Nitrogen
D13c	Laboratory	Liquid Nitrogen [160 L] and Compressed Gas (<i>Nitrogen</i>)
D16	Laboratory	Compressed Air [80psi], Solvents [20 L], Acids [20 L], Hazardous Chemicals and Poisonous Materials. Flammable Gases., Compressed Gases (<i>Argon and Oxygen</i>), Solvents.

Room	Function	Potential Hazard
D27	Workshop	Compressed Air [80psi]
D28	Workshop	Compressed Air [80psi]
D29	PCB	Chemicals, Heated baths.
D30	Workshop	Compressed Air [80psi], Acid [10 L], Alkali [50 L], Ferric Chloride [60 L] and Methylated Spirits [5 L].
D35a	Laboratory	Compressed Air [80psi], Compressed Gas (<i>Deuterium</i>), Solvents and Furnace [1100°C].
D49c	Laboratory	Compressed Gases (<i>Air, Oxygen free Nitrogen and Nitrous Oxide</i>), 3-Pentanone [2.5 L], Petroleum Spirit [1 L], Butane/Propane [440g canisters](x3) and Lasers.
F46	Laboratory	Two Compressors (<i>not running continuously</i>)
E14	Laboratory	Lasers, Grain silo.
E17	Laboratory	Compressed Air [80psi]
E26	Laboratory	Nitrogen Gas Cylinder, Liquid Nitrogen

Ferranti Building

A14	Storage	HV plant storage area. Chemicals storage cupboard – Solvents [< 5 L].
B20	Laboratory	HV project laboratory, up to 100kV AC and 30kV DC test sets in individual restricted caged areas. Test rigs only energised during normal working hours. Small volume of insulating oil [< 5 L].
B22	Laboratory	HV test supplies, 150kV AC and 300kV DC. Test supplies only energised during normal working hours.
B23	Laboratory	HV test supplies, HV ac, HV dc and impulse, up to 2000kV. Test supplies only energised during normal working hours.
B23	Laboratory	Out door oil store located in HV yard, approximately 700 litres of insulating oil stored.
B24b	Laboratory	Laboratory ovens and vacuum ovens with 300°C 0.1bar capability
B24b	Laboratory	Chemical cupboard – solvents <20 litres; Sodium Hypochlorite (bleach) 20 litres
B26	Laboratory	415V load simulation test rig, exposed 415V terminals when test rig is energised.

APPENDIX 6

EVACUATION OF PERSONNEL WITH A PHYSICAL DISABILITY

(including those with a temporary disability)

RULES

Staff or student with a physical disability should inform the School safety Advisers who will work with the School disability coordinator to draw up a personal evacuation plan.

LIFTS should **NOT** be used during an emergency evacuation.

NO attempt should be made to get a WHEELCHAIR down the STAIRS.

Two safe refuge points have been established within the Sackville Street Building.

Outside F47 lecture theatre stair case and outside C18 teaching laboratory by the fire doors. Only trained staff are to attempt to make use of the fire evacuation chairs.

Persons unable to use the stairs should make their way to the nearest SAFE STAIRWAY and **REMAIN** there protected by the fire doors until rescued by the Fire Service.

If possible, a volunteer should remain with the person with a physical disability to guide rescuers and check the fire doors.

Another person, who will probably be the floor fire marshal, should report the position of the person with a physical disability to the Fire Service or a building Safety Adviser (wearing a yellow fluorescent waistcoat).

NOTES:

- (1) Persons who appear not to have heard the evacuation alarm should be informed of the fact.
- (2) Blind or partially sighted persons should be escorted down a safe stairway.
- (3) Persons with walking difficulties (e.g. due to a broken leg in plaster) should be given assistance on the stairs by a fit volunteer.
- (4) Should it be necessary to carry a person with a physical disability from a place of immediate danger, at least four fit persons are needed, more if the person is to be carried any distance, if they are to avoid possible injury to themselves. If possible, this activity should be carried out by appropriately trained staff.

Stephen. P. Duffy (School Safety Adviser, Sackville Street Building)

OUT OF HOURS, Permit Application

Please refer to the “**Out of Hours Guidance**” before completing this application.

Please issue the following individual with an ‘Out-of-Hours’ Working Permit (Green Card)

Applicants Name: **ID NO:**

For accompanied working in rooms.....

For unaccompanied (lone) working in rooms (**NO** Laboratories).....

Permit start date: **Valid for 12 months**

Brief Nature of Work:

.....

State any restriction to be applied to the permitted hours.....

NOTE : The supervisor must ensure compliance with the University Safety Regulations and that a risk assessment of the area and the activities of the individual have been undertaken.

A copy must be attached to this application.

I confirm that this individual has received an appropriate and specific safety induction for this research group and has been made aware of the hazards, control measures and safe systems of work.

Academic Supervisor

Name: (Please Print)

Research Group:

Signed: Date:

Please bring this **completed** form to Mr Mike Ash, Technical Services Manager
Room **D5, Sackville Street Building**, Ext. 64759 m.ash@manchester.ac.uk

I confirm that he/she has received appropriate induction on safe working practices by the Safety Advisor for the relevant buildings and is aware of the fire drill.

School Safety Advisor

Ferranti – Mr. F. Hogan HV/B22

Signed: Date:

Permit Issued by:Date:

Appendix 8

AREA CLEARANCE AND DECONTAMINATION CERTIFICATE

To			
<i>Name</i>		<i>Position</i>	
<i>Tel.</i>		<i>Email</i>	
From			
<i>Name</i>		<i>Position</i>	
<i>Tel.</i>		<i>Email</i>	
Location of room/area			
<i>Dept</i>		<i>Floor</i>	
<i>Building</i>		<i>Room</i>	
<i>Description of room/area (e.g. office, lab, cleanroom etc)</i>			
<i>Purpose of clearance/decontamination</i>			
<i>Declaration/Signature (to be completed by the person responsible for the room/area)</i>			
<i>I, the undersigned, confirm that all the details described here and on the next page are correct.</i>			
<i>Name</i>		<i>Position</i>	
<i>Tel.</i>		<i>Email</i>	
<i>Signature</i>		<i>Date</i>	

The decontamination section on the next page must be completed

Appendix 8

Decontamination (tick and complete the appropriate sections below)	
1. The room/area has not been used for any purposes involving hazardous substances	<input type="checkbox"/>
2. The room/area has been completely cleared of all equipment, chemicals and hazardous waste and has been left in a clean and safe condition	<input type="checkbox"/>
3. It has been agreed with the relevant party (e.g. departmental laboratories & facilities manager) that the equipment listed below can remain within the room/area after vacation. All such equipment has been appropriately decontaminated and individually labeled with Equipment Decontamination Certificates	<input type="checkbox"/>
Details:	
4. The remaining fabric, services and fixtures (including fixed items of plant e.g. fume cupboards) may have been exposed to hazardous materials but these have been effectively decontaminated. No special precautions are necessary to protect against contamination when handling the services and fixtures unless specified under 5 below.	<input type="checkbox"/>
Possible contaminants:	
Biological agents or GMOs <input type="checkbox"/>	Hazardous chemicals <input type="checkbox"/>
Clinical material <input type="checkbox"/>	Radioisotopes <input type="checkbox"/>
Other (please specify)	
Decontamination procedure undertaken:	
5. Complete decontamination of some aspects of the fabric, services or fixtures cannot be practicably achieved and some residual contamination may remain.	<input type="checkbox"/>
Nature of residual contamination:	
It is advised that the following precautions are observed when handling these items:	

Appendix 9

Safety Coordinator's Report		
Group/Area:		
Period of report:		Start Date: End Date:
Completed by:		
Item	Number	Comments
List any new hazards introduced into your group/area		
New Risk Assessments Completed		
Existing Risk Assessments Reviewed		
Existing Risk Assessments Withdrawn		
Near Misses Reported		
Accidents Reported		
Local Safety Inductions completed		
Please record below any other significant matters that you feel should be reported to the Safety Committee		

WORK ACTIVITY/ WORKPLACE (WHAT PART OF THE ACTIVITY POSES RISK OF INJURY OR ILLNESS)	HAZARD (S) (SOMETHING THAT COULD CAUSE HARM, ILLNESS OR INJURY)	LIKELY CONSEQUENCES (WHAT WOULD BE THE RESULT OF THE HAZARD)	WHO OR WHAT IS AT RISK (INCLUDE NUMBERS AND GROUPS)	EXISTING CONTROL MEASURES IN USE (WHAT PROTECTS PEOPLE FROM THESE HAZARDS)	WITH EXISTING CONTROLS				MEASURE REQUIRED TO PREVENT OR REDUCE RISK (WHAT NEEDS TO BE DONE TO MAKE THE ACTIVITY AS SAFE AS POSSIBLE)	PERSON RESPONSIBLE FOR ACTIONS AND AGREED TIMESCALES TO ACHIEVE THEM	WITH NEW CONTROLS			
					SEVERITY	1 LIKELIHOOD	RISK RATING	RISK ACCEPTABLE			SEVERITY	2 LIKELIHOOD	RISK RATING	RISK ACCEPTABLE

Assessment ID Number (E&EE_Initials_DATE_Number)..... **Activity Location:**.....

RISK ASSESSOR	NAME:	SIGNED:	DATE:	THIS RISK ASSESSMENT WILL BE SUBJECT TO A REVIEW NO LATER THAN: (MAX 12 MTHS)
MANAGER/SUPERVISOR	NAME:	SIGNED:	DATE:	
Student:	NAME:	SIGNED:	DATE:	

IF THE ANSWERS TO ANY OF THE QUESTIONS BELOW IS YES THEN ADDITIONAL SPECIFIC RISK ASSESSMENTS MAY BE REQUIRED.

IS THERE A RISK OF FIRE?	Y/N	DOES THE ACTIVITY REQUIRE ANY HOME WORKING?	Y/N
ARE SUBSTANCES THAT ARE HAZARDOUS TO HEALTH USED?	Y/N	ARE THE EMPLOYEES REQUIRED TO WORK ALONE	Y/N
IS THERE MANUAL HANDLING INVOLVED?	Y/N	DOES THE ACTIVITY INVOLVE DRIVING	Y/N
IS PPE WORN OR REQUIRED TO BE WORN?	Y/N	DOES THE ACTIVITY REQUIRE WORK AT HEIGHT	Y/N
ARE DISPLAY SCREENS USED?	Y/N	DOES THE ACTIVITY INVOLVE FOREIGN TRAVEL	Y/N
IS THERE A SIGNIFICANT RISK TO YOUNG PERSONS?	Y/N	IS THERE A SIGNIFICANT RISK TO NEW / PREGNANT MOTHERS?	Y/N

Severity value = potential consequence of an incident/injury

5	Very High	Death / permanent incapacity / widespread loss
4	High	Major Injury (Reportable Category) / Severe Incapacity / Serious Loss
3	Moderate	Injury / illness of 3 days or more absence (reportable category) / Moderate loss
2	Slight	Minor injury / illness – immediate First Aid only / slight loss
1	Negligible	No injury or trivial injury / illness / loss

Likelihood value = what is the potential of an incident or injury occurring

5	Almost certain to occur
4	Likely to occur
3	Quite possible to occur
2	Possible in current situation
1	Not likely to occur

risk rating = severity value × likelihood value

risk ratings are classified as low (1 – 5), medium (6 – 9) and high (10 – 25)

Risk Classification and Actions:

Rating	Classification	Action
1 – 5	Low	Tolerable risk - Monitor and Manage
6 – 9	Medium	Review and introduce additional controls to mitigate to "As Low As Reasonably Practicable" (ALARP)
10 – 25	High	Stop work immediately and introduce further control measures

		SEVERITY				
		1	2	3	4	5
LIKELIHOOD	1	Low	Low	Low	Low	Low
	2	Low	Low	Medium	Medium	High
	3	Low	Medium	Medium	High	High
	4	Low	Medium	High	High	High
	5	Low	High	High	High	High

Document control box	
Procedure title:	School of E&EE Safety Policy
Date approved:	30 th November 2010 – Minor changes
Approving body:	School of E&EE Health & Safety Committee, Head of School
Version:	6.0 Revision 0.1
Supersedes:	School of E&EE Safety Policy Version 5, Revision 0.4
Previous review dates:	5th October, 2009 – Major changes
Next review date:	Upon significant change
Related documents:	School Risk Assessment, Out of Hours Permit application form, Laboratory Clearance Certificate, Safety Coordinators short form report.
Related Statutes, Ordinances, General Regulations	Health & Safety at Work etc Act 1974, and relevant statutory provisions. The Management of Health and Safety at Work Regulations 1999.
Related Policies:	University health & safety policy statement
Related Procedures	A-Z of documents on specific health & safety topics, at Successful health and safety management HSG65.
Related Guidance	
Related information:	N/A
Policy owner:	School E&EE H&S Committee
Document created by:	Stephen Duffy – School Safety Advisor Stephen.duffy@manchester.ac.uk 0161 306 4818