

# Earth Sciences Safety Handbook

October 2023

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#### HEALTH AND SAFETY POLICY STATEMENT

#### **Health and Safety Policy Statement:**

It is the policy of the Department of Earth Sciences to continue to ensure, so far as is reasonably practicable, the health, safety and welfare of all its staff, students and any other persons who may use and/or visit the Department's premises or who may be affected by the activities of the Department. Compliance with legal obligations is the minimum standard.

The Department is committed to planning, implementing and reviewing its health and safety arrangements in order to achieve continual improvement in performance, the aim being to promote best practice in all areas of health, safety and the environment.

The maintenance of safe and healthy working conditions requires the active co-operation of everyone in the Department, each of whom has a duty to take care of his or her own safety and that of others. Every individual has a duty to co-operate in the attainment of safe working conditions by: taking care of their own health and safety and that of others; never interfering with safety equipment; familiarising themselves with the University Health and Safety policy; to attend the required health and safety education and training, and to bring situations that they believe to be dangerous or shortcomings in the safety arrangements to the attention of the Safety Committee.

Professor Richard Harrison Head of Department

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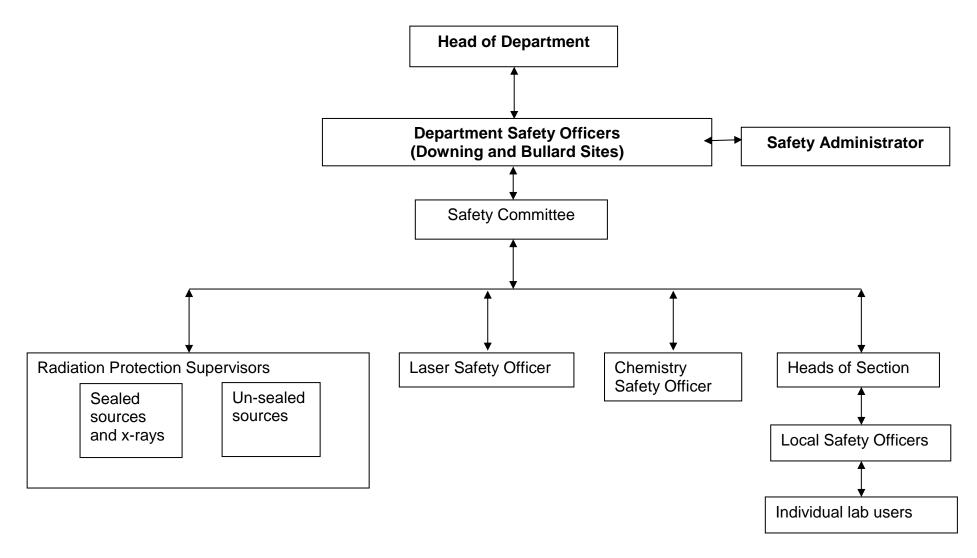
Read the University Safety Policy here

#### NO SMOKING POLICY

The Department of Earth Sciences operates a strict No-smoking policy in all of its buildings and outside adjacent to areas which present a particular fire hazard. Persons wishing to smoke are asked to do so away from doors and windows so as not to inconvenience occupants of buildings.

#### **Safety Roles Diagram**

NB Please see the IEEF H&S Policy Statement for safety responsibilities in the Institute for Energy & Environmental Flows (IEEF).



#### SAFETY RESPONSIBILITIES

#### **DEPARTMENT SAFETY COMMITTEE**

**Head of Department** 

Department Safety Officer, Committee Chair

**Laser Safety Officer** 

Dr E Ringe **Lead Radiation Protection Supervisor** (unsealed sources) Prof I Farnan **Radiation Protection Supervisor** (sealed sources, x-rays) Ms Rosa Danisi Radiation Protection Supervisor (Museum natural sources) Mr D Pemberton TBC bullardfac@esc.cam.ac.uk

Safety Officer (non-IEEF areas) and Fire Manager, Bullard Labs

Safety Officer (IEEF)

Fire Manager/Principal Technician

Workshop Manager

**Business Operations Manager** Deputy Department Administrator

Chemistry Safety Officer

Fieldwork Godwin Lab

Sedgwick Museum Representative

Safety Administrator, Committee Secretary Safety Advisor, Health and Safety Division

Teaching

**Teaching Support Graduate Representative** Union Representative

Dr C Kenchington James McCann

Vacant

Prof R Harrison

Dr M Vautravers

Ms Sharada Crowe

Ms Emma Chapman

Mr C Aldous

Mr C Parish

Ms A Cook

Dr Neil Davies

Ms S Hammond

Mrs M E Austin

Dr Alex Copley

Ms A Eccles

Dr J Dav

Mr J Rolfe

**Bold type** for a Committee member's role indicates a formal Department safety position.

#### **HEADS OF SECTION**

Institute for Energy & Environmental Flows (IEEF) (Madingley Rise)

**IEEF Colloids Interface Laboratory** 

**IEEF Fluids Lab** 

IEEF Polymer Colloids Lab

X-ray Spectroscopy and Carbonate biogeochemistry

Palaeontology Processing

Teaching Fieldwork

**Electron Probe Laboratory** 

Radioactive Material Preparation, NMR Spectroscopy & Workshops

Chemistry and Rock Processing

Mineral Magnetism & Electron Microscopy

Sedgwick Museum and Brighton/Rock Store Buildings

Godwin and Sedimentary Laboratory

Student Photography & experimental Palaeontology

Ocean Geochemistry Photon Spectroscopy **Elasticity Laboratories** Mill Lane Core Store

Rock Cutting Thin Section Preparation

Radiocarbon Laboratory

Isotope Geochemistry "Clean labs"

Mineralogy and Petrology Marine Biogeochemistry Vertebrate Morphology **High Temperature Laboratory**  Prof Andy Woods **Prof Stuart Clarke** 

Dr Charlotte Gladstone

Prof Alex Routh Dr Oscar Branson Prof Nick Butterfield **Prof Alex Copley** Dr Neil Davies

**Prof Marie Edmonds** Prof Ian Farnan Prof Sally Gibson Prof Richard Harrison

Dr Liz Hide **Prof David Hodell** Dr Alex Liu

Dr Alex Piotrowski Dr Emilie Ringe **Prof Michael Carpenter** 

Mr James Rolfe Dr Owen Weller Prof Luke Skinner **Prof Edward Tipper** & Prof Helen Williams Prof Nick Tosca Prof Sacha Turchyn Dr Daniel Field

Dr David Wallis

# Annual Report of Earth Sciences Department Safety Committee 2022 – 2023

We have now returned to normal operations after a long post-Covid transition. Alison Cook has been appointed as our new Business and Operations Manager. During 2022-2023 we have maintained the usual high standard and further progressed towards a safer Earth Sciences Department in all aspects of our very varied and always expanding activities.

A big thank you to all staff involved in H&S roles, PI's, Laboratory Managers, Workshop and Building Managers, Local Safety Officers, First Aiders, Fire safety Roles, Field Trip Leaders/Drivers and all staff supporting our field trips. Last but not least a huge thank to Michelle Austin for her dedication and professionalism in maintaining all records in good order.

Rosa Danisi is replacing Luke Rochford as our new Radiation Protection Supervisor for sealed sources and Adam Osmond is now a qualified first aider at work based in the workshop on the Downing Site. Special thanks go to Dan Pemberton and Robert Siegel for having developed a comprehensive Asbestos Management Plan for all museum samples and their great expertise and support in this area. Thanks to Chris Parish joining the H&S committee (workshop) for becoming a H&S trainer (manual handling) and also for having led our workshops through much needed H&S upgrades in the past year and through a successful H&S audit by Cambridge H&S office.

A big thank goes to James Rolf based in the Godwin lab standing down after more than 25 years as a dedicated first aider at work. Finally, all our best wishes for a long and happy retirement go to Dudley Simons retiring from his DSO role at Bullard.

Thanks for all of you who attended H&S trainings and are making the ESC Department a safe place to work and study.

The latest Health & Safety Committee Minutes can be found here

# **Communicable Diseases including Coronavirus (Covid-19)**

At the time of this handbook revision (October 2023) information contained within this document should be read in conjunction with <a href="https://example.com/html/>
HSD097M - Preventing communicable disease transmission and creating a healthy workplace">
healthy workplace</a>

Staff/Students **should NOT attend the Department** when presenting with symptoms of respiratory infections, and particularly when experiencing a high temperature. Those experiencing symptoms should work from home if they are able and feel well enough to do so, or take time off to recover fully before returning to the Department. Further guidance can be found in the link above.

If you have any questions or concerns please contact Maryline Vautravers <a href="mv217@cam.ac.uk">mv217@cam.ac.uk</a> or Michelle Austin <a href="mea42@cam.ac.uk">mea42@cam.ac.uk</a>.

The University Communicable Diseases Helpdesk can be contacted on 01223 339514

The Helpdesk is available for advice and information about COVID-19 but has now expanded its remit to managing other infectious diseases, in line with the Department for Education's requirements for public health management within educational settings. It will co-ordinate the response to any incidents or outbreaks of: E.coli O157 / E coli STEC; food poisoning; hepatitis A, B and C; measles; mumps; rubella; meningococcal meningitis; septicaemia; scarlet fever; tuberculosis (TB); typhoid / paratyphoid; and whooping cough as well as acute respiratory infections such as COVID-19. Although the risks of outbreaks of these infections linked to the workplace is likely to be very low, Departments are asked to contact the Helpdesk if they hear of a case amongst their staff, or if they observe a higher than normally experienced and/or rapidly increasing number of staff sickness absence due to acute respiratory infection or diarrhoea and vomiting. The Helpdesk will confirm current public health advice and seek further guidance from the UKHSA Health Protection Team as necessary.

#### SAFETY ORGANISATION

The Head of Department, Prof Richard Harrison, has the duty and legal responsibility for the implementation of the University and Department Safety policy. In order for him to do this, he has delegated duties in writing to the Department Safety Officers; Department Safety Administrator; Officers for Laser Safety, Chemistry Safety Officer, the Department Radiation Protection Supervisors, Fire Managers and the Head of each Section. A number of other staff are involved and helping regularly by performing H&S tasks (Portable appliances testing, Fire alarm testing, contractors Britgeng checking lifts, Applied First Aid for Fieldwork trainers, Equans staff for water safety, etc.) to maintain a high standard of safety in our building and all activities

The Safety Officer coordinator and the Safety Administrator act as a focus for the flow of information to and from the Department. Within the Department, the flow of information to and from members of the Department is generally via the Heads of Sections or their Local Safety Officers.

#### **Health and Safety Committee**

The Department has a committee to oversee the Department's policies on health and safety, and to ensure their implementation and communication. The full Department Safety Committee meets once a year. A Chemical Safety Review is held annually in October, and a Field Safety Review takes place each October. Additional meetings may be called if required. Membership of the Safety Committee includes a Trades Union, and a Graduate Students' representative.

The purpose of the Safety Committee is:

- To receive safety reports from all sections of the Department, to decide on any action necessary, and to monitor its implementation.
- To advise the Head of Department on health and safety matters.
- To discuss and resolve any matter relevant to health and safety brought to its attention.
- To agree and review emergency procedures.
- To receive reports on safety inspections, and monitor the completion of recommended action.
- To receive reports of accidents and incidents and the results of investigations, and to agree action to be taken to prevent recurrence.
- To monitor completion of appropriate risk assessments.
- To ensure that information received from the University Safety Office and Safety Advisors regarding changes in health and safety regulations is acted upon.
- To review the Health and Safety Policy annually, and to approve additions and amendments as appropriate.

The Committee will consider any relevant matter brought to its attention from inside or outside the Department, and will make recommendations to the appropriate staff. Members of the Department wishing to raise a topic for discussion are invited to do so by the Safety Administrator at the time of planning the agenda for a meeting, but topics may be brought to the notice of the committee at any time.

Membership of the Committee and Agenda papers and Minutes of meetings are posted on the Safety pages of the Department website. Minutes are also distributed to the University Health and Safety Division and to all members of the committee.

#### **Heads of Section**

Heads of Section have specific additional responsibilities for safety. These are:

- (a) to appoint, if necessary, suitably competent staff as Local Officers Responsible for Safety and to draw up the working procedures and codes of safe practice for their areas;
- (b) to implement the Department Safety Policy in their section by ensuring that activities within their section comply with health and safety requirements, and that appropriate procedures are in place for regular inspections and risk assessment, which may include Control of Substances Hazardous to Health (COSHH); risk assessments of new equipment before use and projects prior to their commencement; the evaluation of risk assessments and any remedial action to be taken;
- (c) to ensure that workers in their area receive appropriate training, instruction, and supervision so as to safeguard as far as is reasonably practicable, the health, safety, and welfare of those workers;
- (d) to seek advice, when necessary, from the Department Safety Committee, the Department Safety

Officers, the Department Safety Administrator, or Head of Department, and to bring to their attention any inadequacies of the system and any persons in their section who refuse to co-operate over implementing safety procedures or policy;

- (e) to appoint a Deputy for Safety for any period of absence of more than two weeks;
- (f) to take responsibility for Academic Visitors to the group, in ensuring that visitors are aware of, and comply with, the requirements of health and safety law and University and Department policies and practices;
- (g) to ensure all training records are kept up to date.

#### **Local Safety Officers**

Within 'areas', the Head of Section may designate suitably competent academic staff members as Local Officers for Safety. Such officers carry the same responsibilities as all staff members but in addition, they are expected to:

- a) co-ordinate the risk assessments, use of laboratory, 'At Bench' training records and working out of hours forms for members of the various activities within their area;
- b) carry out the general risk assessment for safety in their area; take action based on the assessment and revise it annually or whenever known changes occur, whichever is sooner;
- c) ensure that safe systems of work and codes of safe practice are in place and are being adhered to;
- d) co-operate with the Department Safety Officer, the Department Safety Administrator, and the Safety Committee, and seek their advice on appropriate occasions;
- e) bring to the Head of Section's attention any unsafe practices and breaches of safety instructions in their area:
- f) co-ordinate the reporting and investigation of all accidents or 'near misses' occurring in their area to the Department Safety Officer or Safety Administrator, and take any necessary action to avoid a recurrence.

#### Radiation Protection Supervisors and Laser Officer

The Radiation Protection Supervisors are statutory appointments made in writing by the Head of Department. Their role is to ensure all work with radiation complies with UK regulations and local rules. Further safety roles are also appointed by the Head of Department to ensure the safety of workers using specialised equipment or samples, and to maintain implementation of regulations, training and record keeping.

#### Supervision, training and information

All staff in a supervisory position must be familiar with the University Health and Safety Policy, and recognise that they have in this respect responsibility for those whom they supervise. This means promoting and practising good working standards, ensuring equipment is maintained in a safe condition, ensuring that instructions and training are in place, recorded and being followed, and reporting and investigating accidents in order to identify and implement remedial measures. Where students are involved, this person is the teaching officer connected with the teaching of undergraduate studies, or the academic supervisor for post-graduate research and teaching.

All staff in a supervisory position should be proactive in ensuring that all those under their supervision have an appropriate level of information, training, and supervision for the tasks they are required to undertake. Information and training given for lab work must be documented, dated and signed on the individual's 'At Bench' training record, with other training recorded on the individual's Personal Training Record.

#### **Teaching**

On the spot responsibility for student safety in classes falls to the Teaching Officer in charge of the class. The Officer must ensure that the activity of practical classes and field trips is risk assessed and significant findings recorded, and that all equipment is safe and its use verified either by a test certificate or by demonstration, whether in the laboratory or outside the Department. Postgraduate students and casual demonstrators are not expected to carry responsibility for class safety. Nevertheless, they have responsibility as individuals to conduct their work safely and advise undergraduates of safe practices and point out to the Officer in charge any deviations from safe practice.

#### **IEEF Safety**

Safety information for members of the IEEF is available on the IEEF SharePoint site.

Members of the IEEF will be given access to this site when they are inducted into the Institute.

#### FIRE AND EMERGENCY EVACUATION PLAN

## All buildings: Evacuate immediately when the fire alarm sounds

The intermittent or continuous sounding of the alert requires the evacuation of all buildings (Downing Site and Bullard Labs)

# If you discover a fire:

- 1. Raise the alarm at the nearest manual break glass call point, which will operate the alarm system and activate the sirens to alert occupants to evacuate the building.
- 2. Call emergency services on 999 and tell them your location and address of building.
- 3. **Leave the building immediately** via your nearest fire exit and go straight to the designated Fire Assembly Point, which is on the lawn outside Archaeology and Anthropology at Downing Site and main car parks at Bullard.
- 4. Shut off electrical equipment.
- 5. Shut doors and windows as you leave, **only** if safe to do so.
- 6. Do not use lifts.
- 7. Do not stop to collect personal belongings.
- 8. Assemble on the lawn outside Archaeology and Anthropology at Downing Site and designated car parks at Bullard.
- 9. Immediately report any missing person known to have been in the building to the Fire Manager or senior member of staff present.
- 10. **Do not re-enter the building** until given permission by Fire or Security Personnel.
- 11. Inform the Fire Service officer (who will on arrival assume responsibility for fighting the fire) about any special hazards to be taken into account in fighting the fire.
- 12. If the fire is small and contained (i.e. paper bin) and if you are trained and know which fire extinguisher to use you may try to put the fire out ONLY IF IT IS SAFE TO DO SO. If you are unsure, leave the building do not put yourself or others at risk!

**Disabilities**: If an emergency evacuation of the building becomes necessary, assistance will be given to people with disabilities. If you are aware of anyone in this category, or invite any disabled visitors or guests, please inform the Department Health and Safety Officer before their visit. Staff and students are always responsible for their visitors, instructing them what to do in case of fire.

**University Security personnel** will respond in all fire situations. If you have to evacuate the building out of normal hours when there is no Department fire team or management on site, go to the assembly point where you will come under their guidance. Senior members of Earth Sciences will be called to the site by them.

# **EMEGENCY CONTACTS**

In an emergency, call for help as follows:

## IN WORKING HOURS

	Downing Site		EEF/Brighton
First Aiders	Jason Day (HF) 65282 Marie-Laure Bagard (HF) 33441 Oscar Branson 33427 Heye Freymuth (HF) 33455 Adam Osmand 68348 Charlotte Kenchington 33416	Sandra Freshney Dan Toy Tom McCoy Mark Turner	65717 07858 261028 07934 009323 07757 082844

# OR contact Reception/Switchboard on 33400 to arrange help immediately

Nearest other First Aiders are:	Arch & Anth 33516 McDonald Institute 33538 Physiology Reception 33750 Plant Sci Reception 33900	Astronomy Dept Mark Hurn Debbie Peterson	37548 37537 68871
SafetyOfficer	Maryline Vautravers 68347	bullardfac@esc.cam.ac Sharada Crowe(IEEF)	
Business	Alison Cook		
Operations	33421		
Manager	O		
Principal	Charlie Aldous	bullardfac@esc.cam.ac	c.uk 37198
Technician and Fire Manager	33476		
Deputy Fire	Chris Parish	Andrew Pluck 37199/	37198
Manager	33465		
Emergency	From any internal	From any internal phor	ie
Services: Fire/ambulance/	phone	1 999	
police	1 999	If building alarm goes of	off
University Security	31818	31818	
Site Porter	33864		

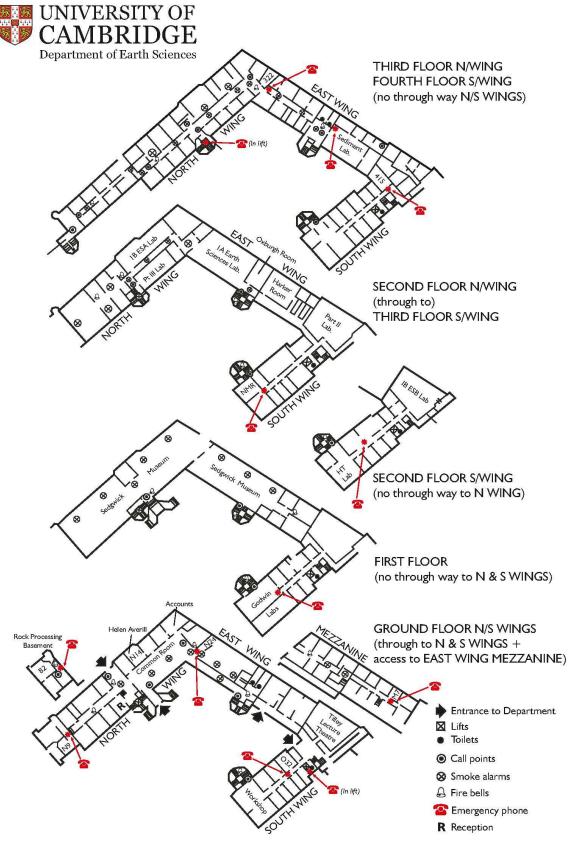
# **OUT OF WORKING HOURS**

University Security Control Room: Emergency number 101 General number e.g. if any of the building alarms go off: 31818

WORKING OUTSIDE THE DEPT: In an emergency contact: University Security +44 (0) 1223 331818

ON HEARING THE FIRE ALARM EVACUATE THE BUILDING IMMEDIATELY

# **Emergency Phones** (Downing Site)



Learn to locate the nearest: emergency phone, fire exit, call point, fire extinguisher and first-aid box

## **ACCIDENTS, INCIDENTS AND FIRST AID**

#### What to do in the case of injury

Call a First Aider (see list p 9) or ring Reception (33400) for Downing Site. If no First Aider is available in working hours, call one from a nearby Department as listed on page 11 above. Names and numbers of all University First Aiders can be found <a href="https://example.com/here.com/he

#### **Emergency phones are located around the Earth Sciences Dept. on the Downing Site.**

If the **Emergency Services are required, dial 1-999** on any internal phone. For **Downing Site**, direct emergency services to the Department of Earth Sciences, specifying Downing Site, and Tennis Court Road. Send someone to meet them at the entrance to the site.

For **Bullard Labs**, specify Madingley Road, next to Conduit Head Road and mention that current satnav systems using correct postcode, CB3 0EZ, misdirect vehicles to Huntingdon Road. Whoever places the call must give their own extension number or mobile number and emphasize that the call centre should ignore the 336633 (main University) number that shows up when the call is placed. Arrange for someone to meet them at the bottom of drive at Bullard and take them to the patient/casualty.

First aid boxes are available throughout the Department. Members must acquaint themselves with the position of the box nearest to their place of work. If items from the first aid box are used, please inform the Safety Administrator (Downing site) or bullardfac@esc.cam.ac.uk (Bullard) so they can be replaced.

**AEDs** are located at Downing site Reception, and in the Foyer of the Wolfson building at the Bullard site. The AEDs are checked monthly by the Safety Officers. Untrained people have used AEDs successfully to save lives therefore the lack of training (or of recent training) should not be a barrier. If someone is willing to use the AED they should do so. Training to use AED is also part of the first aid training.

#### **Reporting Accidents and Incidents**

All accidents, incidents, and dangerous occurrences in the Department or on University business (including field trips) must be reported as soon as practicable, preferably within 24 hours. If you are in the field, you should telephone the Department as soon as possible. All accidents, whether causing injury or not, must be reported on the University Accident and Incident Report System (Assessnet) as soon as possible.

The online form needs to be completed either by the person concerned, the attending University Appointed First Aider, or by any other witness. The following people can help with completion of the form:

Downing Site: Maryline Vautravers (Safety Officer) or Michelle Austin (Safety

Administrator);

Bullard Labs: <u>bullardfac@esc.cam.ac.uk</u> or Sharada Crowe

A <u>paper checklist</u> of the information you will need when using the online system are in the first aid boxes. When recording information on an incident General Data Protection Regulations (GDPR) should be complied with. <u>University Safety Manual "First Aid Handbook"</u> includes further details of accident reporting procedures

Accidents involving damage to equipment must also be reported on the same system. If you need help with this, please ask the Principal Technician, Downing Site, <a href="mailto:bullardfac@esc.cam.ac.uk">bullardfac@esc.cam.ac.uk</a> for Bullard. 'Near misses' must also be reported so that future accidents can be avoided.

#### **Working Away from Cambridge**

The Department has a dedicated email address <a href="mailto:travel@esc.cam.ac.uk">travel@esc.cam.ac.uk</a> so that all Department members can send details of any short term 'work away' not covered by existing travel risk assessment processes. This system is for low-risk travel only i.e., where the activity is similar to that encountered doing low risk work at Cambridge (e.g., office work, attending lectures etc.), other activities are to be covered by travel risk assessments.

Details of activities conferences and external meetings held outside Cambridge should be sent as a short email to <a href="mailto:travel@esc.cam.ac.uk">travel@esc.cam.ac.uk</a> Please complete the <a href="mailto:Low Risk Travel Assessment">Low Risk Travel Assessment</a> in addition please send host address and contact details with your completed assessment.

For any travel that is not classified as low-risk, details should be sent to <a href="mailto:safetydocs@esc.cam.ac.uk">safetydocs@esc.cam.ac.uk</a> including the relevant completed Risk Assessment.

#### **Fieldwork**

All fieldwork must be risk assessed and details on contacts, insurance and this risk assessment given to Maryline Vautravers/Michelle Austin. Accidents occurring in the field must be reported in the same way as those within the Department. Paper checklists for Accident Reporting are provided in the green first aid kits and in the safety folders on taught undergraduate field trips.

Travel insurance will be invalid without an approved risk assessment for fieldtrips. Cover certificates are issued by an automated system rather than the underwriters at the insurance company. Cover is always subject to departmental authorisation and risk assessment as well as the usual proviso that the Insured (the University) and the Insured Person (the traveller) shall take all reasonable precautions to prevent accidents and any injury, loss, destruction or damage and shall take all reasonable steps to observe and comply with statutory or local authority laws, obligations and requirements.

The level of First Aid required for each field trip must be considered as part of the risk assessment. All leaders, demonstrators and research fieldworkers are strongly recommended to take part in a certificated Outdoor First Aid Course held in Earth Sciences twice a year. These courses are arranged through Michelle. First Aid training courses are also available through the University. Hard hats must be worn on field trips. A suitable First Aid Kit must be taken. Goggles or safety glasses must be worn when hammering rock. High-visibility vests are recommended. First Aid kits and other items of safety equipment are available for loan from Michelle or Maryline (N014). People undertaking fieldwork abroad can obtain advice on first aid, vaccinations etc. from University Occupational Health who can be contacted on (3)6594. Advice on travel can be obtained from the UK Government Travel Advice webpage

#### VISITORS AND CONTRACTORS

A safety leaflet showing the location of all exits and the fire assembly point is shown to all visitors to the Downing Site as they register at Reception on arrival and can be handed by PI who have a digital copy prior to any visitor arrival.

**Visiting scholars or research workers** must register their names with the Department Administrator. They must be provided with and read the Safety Policy and this Handbook, and any other information required for them to work safely and in accordance with UK Health and Safety law. An H&S Induction session with the safety officer and signing of the checklist must be arranged. Local safety officers are responsible for laboratory induction and any other H&S local matters such as bench training when appropriate.

All contractors, service engineers and company representatives must report to Reception and identify a contact name in the Department. That contact person will be responsible for overseeing the conduct of the persons concerned whilst on site. The contact person must also ensure that they have drawn the attention of the visitor to any local conditions that may affect their health and safety and that any work carried out by them does not affect the health and safety of other Department users. Contractors are required to obtain permission to work from an authorised member of the Department. Contractors are expected to produce their method statement in advance of commencing any work and relevant RA before working in the department. In the cases of Hot Work or Roof Access, the proper written permission must be obtained from Charlie Aldous at the Downing Site or bullardfac@esc.cam.ac.uk for Bullard, before work can commence.

**Casual visitors** are discouraged. Friends and relatives are the responsibility of the member of Department who invites them.

Anyone hosting a visitor with **specific or additional needs** should contact Maryline Vautravers to discuss arrangements ahead of the visit.

For **parties from schools or other organisations**, formal arrangements must be made for sufficient guides to ensure their safety. For all children (including those on work experience) entering the Department please refer to the Children and Vulnerable Adults Safeguarding Policy

For public events including Open Days, public lectures, etc., each event must be risk assessed to ensure suitable and sufficient arrangements have been made for the safety of all participants.

**Sedgwick Museum visitors** should not be let into the Department. It can cause visitors distress as they can become disorientated or trapped inside. Unsupervised visitors can also pose a security risk. If Museum visitors need to use the lift, e.g. for buggies or wheelchairs, please direct them to the intercom outside the Department Entrance and a member of Museum staff will come down to assist them. The only way into the museum without a University Swipe Card is by the outside steps.

#### LABORATORY FACILITIES

#### **Teaching Laboratories Code of Safe Practice and Good Conduct**

This document is available from the Safety Pages of the Department website.

The observance of safe practice is a condition of use of any Department facility, and it is the responsibility of all members of the Department to ensure that before using any facility they consult and have **formal permission** from the Head of Section and, if appropriate, the Local Safety Officer for the laboratory, who will arrange training or instruction in the safe use of that facility. All users must be properly acquainted with the operation of the equipment and with the emergency and safety procedures to be followed in its use. For all activities, especially **new activities**, a risk assessment must be carried out, and a Chemical Hazard Risk Assessment form completed if appropriate (see section on CHEMICAL SAFETY). **Specific safety procedures** also apply to work involving hydrofluoric acid, cryogenic liquefied gases, radioactive substances, x-rays, lasers, and ultraviolet light. Any member of Department whose work involves any of these **must** ensure they have a thorough knowledge of the current procedures, attended any training available, and have had any necessary health checks before starting work.

In the event of an accident causing personal injury, contact Reception 33400 or via one of the red phone for a First Aider or dial 1-999 from an internal landline for the Emergency Services.

If equipment is damaged, the staff member in charge must be informed immediately, and a <u>University Property Damage Form</u> should be filled in. Appropriate emergency procedures must be followed. These will usually be referred to in the code of safe practice for the section and users must familiarise themselves with them. All accidents must be reported to the Safety Officer, Safety Administrator, Principal Technician or by completing a <u>University Accident and Incident Report System</u> (AssessNET).

Visitors are not permitted to enter an experimental laboratory, unless authorised by the academic staff member in charge.

Periodic safety inspections of the whole building are organised by the Safety Officer, and the results are reported to the Department Safety Committee.

**Safety Protocols** for all areas are displayed on the wall of each laboratory, and risk assessments are kept in the Green safety file for each Section under the responsibility of the Head of Sections/Lab Managers. These are living documents and are revised regularly, so users must ensure that they are aware of the current versions and must abide by their contents.

The full complement of Safety Protocols and appendices are available on the Safety section of the Department's website under the heading "Department Codes of Safe Practice". All forms and appendices to these Codes of Safe Practice are also available in the same way, and laboratory workers must abide by their contents.

#### PERSONAL TRAINING RECORD

#### **Guidance on using the Personal Training Record**

#### What safety training is required?

The Management of Health and Safety at Work Regulations require the University to provide adequate health and safety training on induction, when there is exposure to new or increased risks and to repeat the training periodically where appropriate.

Members of the University are required to attend any health and safety training which the University or their institution decides is needed to enable them to become competent in the health and safety aspects of their work.

#### Who should use the Record?

- The <u>Personal Training Record</u> is primarily intended for those who work in laboratories, workshops or similar areas where practical work is undertaken.
- It is intended for staff, including maintenance staff, office staff, assistant staff, academic and academic related staff, other research workers and visitors, and students.

#### What is the function of the Record?

All safety induction, training courses and instruction received throughout an individual's time at the University should be recorded here.

- The holder can use it to identify any shortfalls in safety training, instruction and information if they are asked to carry out new work.
- It can be used during appraisals when considering training needs for staff development.
- The holder can also use it if they do similar work in a different Department as evidence that they have already received training and instruction, but they must also be familiar with any local rules or procedures.
- The Group Leader/Academic Supervisor can use the Record to ensure that everyone under their supervision has received the necessary training and instruction to work safely.
- Departments should include the Record as part of their training records system.

#### What to do with the Record

- The individual keeps the original of the Personal Training Record.
- After initial training, instruction and information has been provided and recorded, a copy of the document should be given to the Head of Section/Academic Supervisor/Local Safety Officer and to the Safety Office (N014).
- Further training and instruction should be recorded on the Record. Further copies should be given annually (in June or July) to the Head of Section/Academic Supervisor and to the Safety Officer.
- When the individual leaves the Department, a copy of the Record must go to the Safety Officer.

Downloadable copy of the Training Record is available here.

Please ensure that you have completed and listed the following on your Personal Training Record:

- Safety Handbook
- First aid arrangements
- AssessNET system for reporting accidents, incidents, near misses and equipment damage
- Fire evacuation and security procedures
- Electrical safety
- · Lone and out of hours working

- Use of ladders and work at height
- Display screen equipment and microscope use
- Manual handling

#### Additionally, please consider the following if relevant:

- · First aid for fieldwork training
- Driver training
- Selection and use of PPE
- Use of fume cupboards
- Chemical handling, spillage and waste disposal, including COSHH
- Liquid nitrogen, other cryogens and compressed gases/gas cylinders
- Vacuum and pressure equipment
- Use of centrifuges
- Field trip safety
- Radiation safety lasers, sealed/unsealed radioisotopes, x-rays, UV sources, NMR

#### **OUT OF HOURS WORKING**

Working hours for the Department of Earth Sciences at the Downing Site are 08.45-13.00, and 14.00-17.00 and 08.00-17.00 at the Bullard Laboratories, Monday to Friday. Outside these hours and at all times at weekends, the following conditions apply. The Head of Section and/or your Supervisor must also be informed of your intention.

#### **Offices**

If working in the Department late at night or at weekends tell others of your plans and liaise with other people working late using the appropriate contact system for your group. If the fire alarm sounds evacuate the building. If you are nervous about leaving, phone Security on 31818: they will see you out of the building on one of their regular patrols. (If you wish, you can contact Security who will check in regularly with you but you must conform to their instructions.)

Time and working restrictions also apply to areas remote from the Department: these are identified in the safety procedures of the individual area. The Head of Section and/or your Supervisor must also be informed of your intention.

#### **Equipment and Laboratories**

Checks before leaving work at night and at weekends

It is important to double check laboratories before leaving at night:

- as much apparatus as possible should be switched off and unplugged
- individual gas appliances should be turned off locally as well as at the main supply
- doors and windows should be closed.

#### Equipment running at night and at weekends

The permission of the academic staff member in charge of a facility must be obtained before apparatus is left running overnight. All appropriate procedures laid down in the Code of Safe Practice for the Section must be followed and a sign posted in a prominent position showing instructions for switching off the equipment in case of emergency.

Any equipment which may run overnight on mains electricity and which is plugged in to a socket must be labelled on the plug with a registered number. See section on Electrical Safety for details (p24)

#### **Laboratories on Downing Site**

(a) **Working in laboratories out of hours** is allowed only with the specific prior written permission of the Head of Section. Particular care must be taken when using any equipment, or electrical testing of equipment or buildings, changing any pressure line, and cylinders or prototype experimental work. **NOTE: Rock cutting out of hours is strictly forbidden.** 

Out of hours, the research worker must:

- be **accompanied** by another member of the Department whilst working in the laboratory, or be using the **buddy system** and be fully aware of -
  - safety procedures of the laboratory concerned and be able to turn off and make safe
  - emergency exits
  - location of first aid boxes
  - location of a telephone in case of an emergency
  - how to call for help in an emergency.

#### (b) Out of hours Chemistry Laboratory use

In addition to all points in part (a) above:

- The use of any of the chemistry facilities requires compliance with the regulations in the respective laboratory.
- There must be no use of HF acid or hydrazine hydrate.
- There must be no decanting of acids from large to small containers.
- There must be no movement of acids around the Department.

#### (c) Buddy System

Researcher workers should ideally be accompanied in the labs while working out of hours. If this is not possible, the worker must let a colleague or family member (a buddy) know when they arrive and leave the laboratory. Instructions should be given for the buddy to check on the worker if they do not report that they have left the laboratory.

#### Laboratories at Bullard

In the laboratories occupied by the IEEF, normal working hours are from 07.00 to 19.00 with the first and last hours intended for low risk preparatory or closing down activities. Outside of these hours, it is necessary to complete the IEEF Work Outside Hours form which is available from the IEEF Sharepoint site or from Sharada Crowe, the IEEF Safety Officer

Other laboratories on site are controlled by their individual managers, who will agree rules with the Bullard Safety Officer, bullardfac@esc.cam.ac.uk for any out-of-hours working and inform him when this is to occur. **Only low-risk assessment work will be allowed**. Running of lab equipment out of hours must be agreed beforehand contact bullardfac@esc.cam.ac.uk who will ensure that the equipment is safe to be left running unattended and does not pose a risk.

#### **RISK ASSESSMENT**

A risk assessment identifies potential hazards inherent in the task or experiment and recognises the likelihood of foreseeable accidents, injuries or near misses occurring. Realistic and practical precautions and control measures are then instigated to ensure the safety of those who may be exposed to these hazards. The person planning the experiment or operating the equipment must write the risk assessment. The ruling is that those who create risks must manage them responsibly. <a href="http://www.hse.gov.uk/risk/controlling-risks.htm">http://www.hse.gov.uk/risk/controlling-risks.htm</a> gives straightforward guidance on risk assessment. A copy of the completed risk assessment should be sent to <a href="mailto:safetydocs@esc.cam.ac.uk">safetydocs@esc.cam.ac.uk</a>

#### **Fieldwork**

Individuals must write a Field Risk Assessment relevant to their field conditions at the planning stage of all their fieldwork. Assistance is available from Maryline Vautravers and Michelle Austin (Downing Site) and examples of possible hazards and relevant control measures can be found in the Field Risk Assessment. Blank forms and the example Field Risk Assessment can be downloaded from <a href="https://www.esc.cam.ac.uk/resources/health-and-safety/safety-forms">https://www.esc.cam.ac.uk/resources/health-and-safety/safety-forms</a>.

#### **Laboratory Experiments**

Heads of Sections (see p 4) are responsible for ensuring that risk assessments are in place for all experimental procedures carried out in the laboratories for which they are responsible. However, if you devise an experiment or procedure, you are responsible for writing the risk assessment. If any chemical substances are to be used, a Chemical Hazard Risk Assessment must be made, which lists details of all hazardous chemicals used. Heads of Section, Local Safety Officers and users, review risk assessments annually generally in October or at any time there is a change in the procedure. Before use of any labs can be authorised by the Head of Section, all users must complete a Use of Laboratories Permission Form. As part of this process, users must check that risk assessments are in place and are valid for all procedures they intend to undertake or write new risk assessments. "At Bench Training" records provide a signed and dated record that all lab users have received comprehensive training in the techniques utilized in their chemical work.

All laboratory safety forms are available from Heads of Sections, Local Officers for Safety, and from Maryline Vautravers (Downing site) and <a href="mailto:bullardfac@esc.cam.ac.uk">bullardfac@esc.cam.ac.uk</a> (Bullard, non-IEEF), or can be downloaded from the Safety pages of the Department website <a href="mailto:https://www.esc.cam.ac.uk/resources/health-and-safety/safety-forms">https://www.esc.cam.ac.uk/resources/health-and-safety/safety-forms</a> The IEEF has some bespoke forms which are available on the IEEF Sharepoint site or from Sharada Crowe.

#### Access to Work – Specific or Additional Needs

Forward planning is essential to ensure that all members of the Department can be confident of a safe and comfortable working environment. Any member of Earth Sciences having individual specific or additional needs, e.g. in regard to mobility, work station assessment, manual handling, allergy, etc., should contact Maryline Vautravers or Michelle Austin, Downing Site, and <a href="mailto:bullardfac@esc.cam.ac.uk">bullardfac@esc.cam.ac.uk</a> at Bullard, so that any equipment or adjustment required can be arranged. Any injury or disability disclosed will be treated as confidential.

#### Useful contacts and websites include:

Maryline Vautravers – Downing Site, room N014, 33470, email <a href="mv217@cam.ac.uk">mv217@cam.ac.uk</a> or Michelle Austin, room N014, 68347 <a href="mea42@cam.ac.uk">mea42@cam.ac.uk</a>

bullardfac@esc.cam.ac.uk, Bullard Labs, 37198

Occupational Health - 16 Mill Lane, Cambridge, (3)36594

Disability Resource Centre - Student Services Centre, Bene't Street, (3)32301

#### CHEMICAL SAFETY

The University Chemical Safety Training Course is given by the University Chemical/Physical Safety Advisor. This 3-hour safety course is held at intervals throughout the year and all members of Earth Sciences and visitors planning to use hazardous chemicals in their research must attend this course before any work commences in any Earth Sciences lab. The safety course is also available online and is regularly advertised.

The Annual Chemical Safety Review of all Lab safety forms will be on held in Friday 6<sup>th</sup> October 2023 Anyone unable to attend this chemical safety meeting but still needing to use hazardous chemicals or work in an Earth Sciences lab, please contact Jason Day (<a href="mailto:jafd2@cam.ac.uk">jafd2@cam.ac.uk</a>) or Maryline Vautravers (<a href="mailto:mv217@cam.ac.uk">mv217@cam.ac.uk</a>) to discuss the relevant safety measures and to arrange to attend the Chemical Safety Training Course at an alternative time.

#### **Chemicals Hazardous to Health**

Please consult the Earth Sciences Chemistry Officer, Dr Jason Day (<u>jafd2@cam.ac.uk</u>) when planning new laboratory experiments using chemicals. For IEEF work, please contact Sharada Crowe (sdc27@cam.ac.uk)

The COSHH Regulations require all individuals working with substances that can cause certain identifiable diseases or adverse health effects to be kept under health surveillance. For most workers this is confined to maintaining a record of a person's involvement in such work. Individuals who work with respiratory sensitizers, mercury, latex, arsenic and skin sensitizers will have additional health surveillance arranged by the Occupational Health Service.

As a precautionary measure, the University also requires health surveillance for all individuals working with Nanoparticles. Therefore, all persons working with nanoparticles should use this health record form and register with the University's Occupational Health Service.

For further information on the criteria for health surveillance, see the University's Hazardous Substances policy.

Earth Sciences has specific regulations for use of the following chemicals:

#### Hydrofluoric acid

Only trained personnel may use HF. A University training course 'Using Hydrofluoric Acid Safely' can be booked through the Occupational Health and Safety training programme. Anyone working with HF must be fully aware of the first aid measures to be taken in the event of an accident and have checked there is running water and a supply of 'in date' calcium gluconate gel to hand. Before starting any use of HF, ensure all safety measures and PPE are in place. You must alert an HF First Aider to ensure help can be given immediately should a spillage occur. Never handle beakers or bottles containing HF outside normal working hours. The Department Chemistry Officer, Dr Jason Day (jafd2@cam.ac.uk), can be contacted for more information. You must abide by the safety instructions for HF given in Appendix 3 of the Safety Protocols on the Department's website. Refer also to the University Safety Office Guidance.

#### Hydrazine hydrate and hydroxylamine hydrochloride

A COSHH Health Record Form must be completed before you may use hydrazine hydrate (R43, R45) or hydroxylamine hydrochloride (R42, R43). These are available from your Local Safety Officer, Department Chemical Officer or from the Earth Sciences Safety Officer. Copies must be sent to Earth Sciences Safety Officer to be recorded and forwarded to the University Safety Office.

Also, read the section on **Chemical Waste Disposal** in this handbook.

#### **Personal Protective Equipment**

The Department provides appropriate PPE to protect employees who may be exposed to risks to their health and safety except where they have been adequately or more effectively controlled by other means. It is generally the employee's responsibility to use it in accordance with training and instructions, to keep it in good condition as appropriate, and to report any losses or defects which may occur. Please see <u>Safety Office</u> for the latest guidance.

#### Noise

Ear defenders and disposable earplugs are available in laboratories and workshops where noise from machinery/equipment may be excessive. Maryline Vautravers or for Bullard bullardfac@esc.cam.ac.uk should be contacted if a problem arises. Areas where ear protection is mandatory are clearly marked. Appropriate hearing protection is available in these areas, and new users will receive training in its use.

#### Eye protection

Safety glasses with high impact protection must be worn in all workshops. Prescription safety glasses can be provided for people who need them (contact Maryline Vautravers, Downing Site, or bullardfac@esc.cam.ac.uk, Bullard Labs, for details). Goggles or face shields must be worn when working with chemicals to protect from splashes and the full-face shield must be worn when decanting liquid gases (see <a href="Appendix 6">Appendix 6</a> Liquefied Gases on the Health and Safety section of the Department website). Shielded glasses or goggles must be worn when making thin sections to avoid glass chips in the eyes. A special face and eye mask must be worn when welding.

#### **Breathing protection**

Suitable masks must be worn when working with wood or rock dust. Also, you will be requested to answer a simple questionnaire regarding the samples that you want to process in the workshop to prevent accidental Asbestos containing material to be introduced. Various types are available, as recommended by the manufacturers, and must be fitted to your face shape. Facemasks are a part of breathing protection and must be considered together with mechanical extraction and ventilation. A bag valve mask for dealing with breathing difficulties in HF emergencies is kept in HF Crash Kit on 4th floor stairwell above the locker/storage cabinet (to be used only by an HF-specialist University First Aider).

#### **Hand protection**

For all chemical work, ensure that you wear the right type of gloves for the job. Check they are not damaged and change them frequently. For some jobs, double gloves may be appropriate. Heavy-duty gloves are provided in the workshops for welding and heavy lifting etc. First Aiders must ensure they have disposable gloves in the first aid kits. Latex gloves are no longer permitted for use in the University, except where risk assessment has shown that other types are unsuitable. All users are asked to be aware of the possibility of latex allergies, which may occur as dermatitis or asthma. If these symptoms develop, please seek advice, initially from Maryline, Downing Site, or bullardfac@esc.cam.ac.uk/Sharada, Bullard Labs. Workers who are obliged to use latex gloves are required to have health surveillance, organised with Occupational Health.

#### Laboratory wear

Suitable laboratory coats must be worn for all chemistry work, workshops, welding, and any laboratory use requiring personal protection. For the ultra-clean geochemistry laboratories use the **full body suit type**: Tyvek® by DUPONT, classic and industrial model category III CE 0120 types 5 and 6.

#### **Chemical Waste Disposal**

To comply with the requirements of the Water Industry Act 1991, for wastewater discharges from University sites, you must not in any circumstances empty down the drain mercury, or any contaminated waste product containing mercury waste, or any other chemical defined as unsuitable in the University Guidance for Discharges to Drains. Failure to comply with effluent discharge consent conditions could result in the Environment Agency taking legal action. Water discharged to drains is monitored on a monthly basis.

At the Bullard, no chemicals should be disposed of via the drains as they are monitored, with the exception of water, diluted salt water, and diluted dyes. Contact bullardfac@esc.cam.ac.uk for further information.

If in any doubt as to the suitability of disposing of waste chemicals down the drain, please consult the Department Chemistry Officer, Dr Jason Day (jafd2@cam.ac.uk). In general:

- 1. HF must not be poured down drains, except for trace quantities involved in washing beakers etc, in which case a large excess of water should be used. For disposal of waste HF, see 4 below.
- Small volumes of nitric and hydrochloric acid may be disposed of via the drains after dilution to <1% concentration, and rinsed away with excess water. Larger amounts should be collected in acid safe bottles for chemical waste disposal. Other acids may be disposed of via the drains after dilution to <2% concentration, and rinsed away with excess water.</li>

- 3. Some other chemicals may also be disposed of via the drains, for which the permission of the Local Officer for Safety should be sought. If in doubt, consult the <u>Safety Office</u> guidance for Discharges to Drains and the Dept. Chemistry Officer.
- 4. The Department Chemistry Officer (Jason Day) arranges the disposal of hazardous chemicals (including contaminated glassware, gloves, tissues etc.) for Downing Site, Sharada Crowe for Bullard. Clearly marked containers must be used for such substances. See **Disposal of Laboratory and Chemical Waste Policy.**

The Chemistry Officer/Sharada Crowe will arrange for the collection and disposal of chemical wastes in accordance with University procedure.

The University's arrangements for disposing of hazardous waste are explained on the following Sharepoint site for further information:

Welcoming our new suppliers for the disposal of hazardous waste (sharepoint.com)

#### **Compressed Gases and Cryogens**

Compressed gases may be transported and attached only by designated operators, trained in the correct procedures. Do not ride in the lift with pressurised gas cylinders or Dewars of cryogenic liquids. Ensure containers of cryogens are operated only in adequately ventilated areas, as evaporating gases displace vital oxygen in the air. There are oxygen depletion monitors in most labs. In the event of an alarm sounding evacuate the area and do not re-enter and inform the emergency contact as per the lab door sign.

**Do not attempt to change a gas cylinder yourself**. Any suspected leaks must be reported immediately to the local Safety Officer, Head of Section, Chris Parish/Charlie Aldous S032 Downing Site, or bullardfac@esc.cam.ac.uk, for Bullard Labs, or emergency contact.

Ensure you have the necessary authority, training, personal protective equipment, and safety controls as given in individual risk assessments and laboratory procedures. See also "Appendix 6: Liquefied gases", on the Department website's Safety pages.

#### **High Pressure Systems**

Never alter valves or pumps on high-pressure systems contact the Local Safety Officer or Head of Section for assistance. Always comply with the laboratory's risk assessments and safety protocols. Charlie Aldous should be informed of any equipment containing steam under pressure or other items where the PV product exceeds 250 bar litres. These must be registered with the University Safety Office, regularly inspected and have a written scheme of examination.

#### Lasers

The Laser Safety Officer, Dr E. Ringe, must be consulted before installing a new laser. The laser safety policy and protocols are available on the Safety pages of the Department website. All intending new users of Class 3B or Class 4 lasers must register with Dr Ringe.

#### Radiation

Earth Sciences is committed to keeping all doses from work involving ionizing radiation, X rays and radioactive materials (sealed and unsealed) as low as reasonably practicable (ALARP) and well below maximum permitted levels. X-ray machines and all radioactive sources, standards, and spikes are used in conspicuously marked areas with restricted access and must be registered with the Principal Technician Charlie Aldous (S032, Downing Site). The statutory appointment of Radiation Protection Supervisors (RPS) is made in writing by the Head of Department. Ian Farnan is Lead RPS and RPS for unsealed sources, Rosa Danisi for sealed sources and x-rays, and Dan Pemberton jointly responsible for the Museum's collections (natural samples).. The relevant Radiation Protection Supervisor must be involved in planning before changes are made or new experiments developed for radiation work as the RPSs are conversant with the regulations and their role is to

ensure the provision of adequate facilities and arrangements for work with ionizing radiations. Where appropriate, they will consult with University Radiation Protection Officer about the required engineering control measures, suitable documented systems of work, personal protective equipment and personal dosimetry. Radiation risk assessments must be completed in addition to standard risk assessments. No radioactive source can be purchased without financial provision being made for its disposal. The RPS for X-ray generators will ensure that prior authorisation under IRR17 (University Form IR014) and critical examination under IRR17 (University Form IR014) are carried out for all new, altered or relocated equipment. The forms and guidance are available at <a href="here.">here.</a> All workers must be trained, registered and comply with the 'local rules', see the <a href="University document">University document</a> 'Working Safely with Radiation Generators' for further information.

#### **WORKSHOP**

Access to the workshops is by permission by Chris Parish (Workshop Manager) no work may be undertaken without his permission. Workshop staff must ensure that safe working practices are followed and allow only people classed as competent to use equipment and tools.

All tools used should be checked before use to see that they are in good condition. When handling sharp or heavy metal objects appropriate PPE should be used.

Staff or student wishing to have rock's samples processed in the workshop must first fill a form detailing the origin of the samples to assert if more specialized visual examination is requested prior to the processing in order to rule out the presence of asbestos containing material.

#### **Electrical Safety**

Great care must be taken with all electrical wiring and connections. Leads should be as short and direct as possible. Only fused plug tops should be used with appropriate fuse ratings. Electrical wiring must be placed as far away as possible from water supply lines. All sockets and leads must be used within their power limits – generally not more than 13A, or approximately 3kW per socket outlet. Always plug extension leads directly into the wall socket. Please refer to the University's latest guidance.

Reel cables should be completely unrolled before use to prevent overheating of the cable. **Do not "piggy-back" extension leads**, as this reduces the earth connection and may give appliance users an electric shock. If there are insufficient wall sockets, see Charlie Aldous, Principal Technician (Downing Site, S032, or contact bullardfac@esc.cam.ac.uk for Bullard Labs).

All portable appliances must be PAT tested, labelled and recorded by Andrew Stephenson <a href="mailto:as2074@cam.ac.uk">as2074@cam.ac.uk</a> (Downing Site) and bullardfac@esc.cam.ac.uk (Bullard/IEEF). This includes items such as kettles, radios, and mobile phone chargers brought in from home. **Fan heaters are not allowed**; use approved portable oil filled heaters. Any new electrical installations or changes to existing connections must be by persons competent in electrical practices and must be checked and approved by the designated person on site before use.

Chargers for calculators, laptops, phones etc should be turned off when not in use. Chargers have been found in drawers without the current switched off, which constitute an obvious fire risk. Any equipment left to charge must have the charger switched off overnight.

#### Items which are allowed to be left running overnight

The Head of Section or Local Safety Officer for the lab must register these items with Charlie Aldous or for Bullard bullardfac@esc.cam.ac.uk. The green labels for the plugs and forms for registry are also obtained from Andrew or <a href="mailto:bullardfac@esc.cam.ac.uk">bullardfac@esc.cam.ac.uk</a>. A risk assessment must be in place for these items. The Head of Section, who will ensure that the equipment is safe to be left running unattended and does not pose an added risk, must agree running of equipment out of hours beforehand. Contact <a href="mailto:bullardfac@esc.cam.ac.uk">bullardfac@esc.cam.ac.uk</a> or Andrew Pluck for the Wolfson Building at Bullard where an automatic time switch turns off power in all labs at 5pm.

#### **Manual Handling**

Anyone who needs to lift or move heavy objects should obtain advice on manual handling before beginning. Information is available from the HSE: "Getting to Grips with Manual Handling". A risk assessment for Manual Handling tasks should be written where a risk of injury has been identified, following safety office guidance.

In-house manual handling course with Chris Parish is available, and anybody who has to lift or move heavy objects as part of their normal duties is expected to attend. For further details, contact Chris Parish, Downing Site, S032.

Arrangements for dealing with deliveries of heavy objects should be planned in advance. For substantial items of laboratory equipment, etc, the supplier should preferably accept full responsibility for installation in their final location (commitment to this should be obtained in advance in writing). Where this is not the case, it may be necessary to hire removals men. Where unloading of vans etc. is concerned, note that the University's personal accident cover extends only to University premises and to circumstances where the University has been shown

to be negligent in some way. University personnel are not covered if they board a delivery or removals van.

In the event of any anticipated difficulties regarding manual handling, Charlie Aldous should be consulted. Only persons who have received suitable training in its use must use specialised lifting equipment. Inform Charlie Aldous (cjha2 S032) if you bring any lifting equipment onto site as there is a statutory requirement to have all hoists, slings, chains, bolts and shackles etc. inspected.

#### Water Supplies and Drainage

All unattended water-cooled apparatus must be protected against failure, either by using a thermal switch or, if impractical, by a water-flow control switch. A non-return on/off switch must always be fitted.

All water outlets must be used or flushed at least weekly, and the Department Safety Officer supervises water safety aspects now provided centrally by EQUANS. Please contact the safety officer if any water outlet in an area might not be being used for more than 1 week.

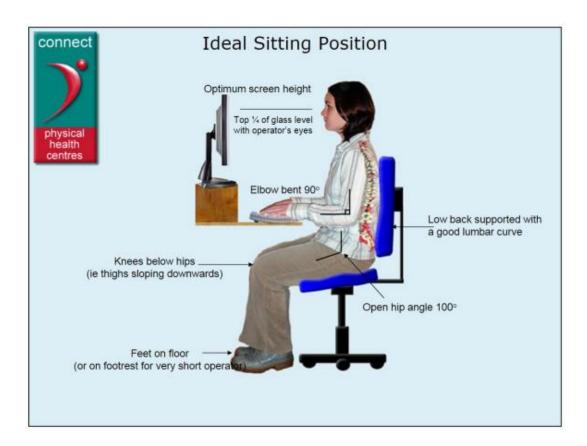
Inform Charlie Aldous of any leak in labs, kitchen or toilets as well any sink blockage or slow drainage as these present a serious risk of flooding.

# OFFICE SAFETY AND USE OF DISPLAY SCREEN EQUIPMENT (DSE)

The hazards and risks associated with office work are significant and should not be ignored.

With many people now having adopted hybrid working the following <u>safety office guidance</u> should be followed when setting up a home office.

- (i) There are a number of physical hazards to avoid:
  - (a) trailing cables put behind desks or use cable covers
  - (b) overloaded plug sockets ask for more sockets
  - (c) shelves piled high with books/files ask for more shelves, use bookends
  - (d) overstretching to reach items get a step stool.
- (ii) The main, avoidable physical hazards associated with office work are those relating to long periods sitting, especially when combined with regular computer use: back strain; upper limb disorder also known as repetitive strain injury; eyestrain.
- (iii) To help with the above, simple arrangements can improve posture and reduce eyestrain:
  - (a) Adjust the chair and screen so that your arms are about horizontal on to the keyboard and your eyes at the same height as the screen. Do not sit with your neck bent down use a document holder to raise papers to screen level. A space in front of the keyboard may be helpful for resting the wrists whilst not typing.
  - (b) Make sure you have enough space underneath the desk to move your legs freely. Try to keep your feet flat on the floor with your ankles and knees forming 90° angles.
  - (c) Avoid excessive pressure on the backs of your legs/knees. A footrest may be helpful.
  - (d) Adjust the chair back to support your lower back. Do not sit for long periods in the same position: walk around and stretch gently, or do something else such as photocopying.
  - (e) Do not bend your wrists up when typing or overstretch your fingers.
  - (f) Arrange your screen so it does not reflect bright lights and so that characters do not flicker or move. Use the brightness control to find a comfortable level for your eyes.
  - (g) Rest your eyes by looking away from the screen and focusing on a distant object and clean your screen regularly.
  - (h) Refer to the <u>University DSE guidelines</u> and the HSE guidelines <u>HSE guidelines</u>
  - (i) DSE users are asked to complete a <u>Work Station Risk Assessment form</u> Work Station Risk Assessment form to identify and address any potential problem areas. Frequent rest breaks are recommended i.e. a 30-second break from DSE use every 5 minutes is better than a longer break once an hour. To reduce eyestrain, look across the room at frequent intervals to allow your eyes to change focus.
  - (j) If you are having any problems with posture or eyes at your desk, seek help from Maryline Vautravers at Downing Site or via bullardfac@esc.cam.ac.uk/Sharada Crowe at the Bullard. They can also assist on the availability of eye tests and other DSE-use advice from Occupational Health.



- Seat-back should be adjustable
- Good lumbar support should be provided by the chair
- Seat height should be adjustable
- Foot support if needed
- Space for postural change no clutter under desk
- Forearms approximately horizontal
- Minimal extension, flexion or deviation of wrists
- Screen height and angle should allow comfortable head position
- Space in front of keyboard to support hands/wrists

Workstation user:	Location:	
Assessor:	or: Date of assessment:	
COMPUTER	Screen:	
	Are the characters readable?	Yes No
	Is the image stable?	Yes No
	Can brightness and contrast be adjusted?	Yes No
	Does the screen swivel and tilt?	Yes No
	Is the screen free of glare and reflections?	Yes No
Notes:		
	Keyboard and mouse:	
	Can the keyboard be tilted?	Yes No [
	Can a comfortable keying position be found?	Yes No
	Can the hands be rested in front of the keyboard?	Yes No
	Can the characters on the keys be read easily?	Yes No
	Is the keyboard clean?	Yes No
	Is the mouse positioned close to the user?	Yes No
	Can a comfortable position be found when using the mouse?	Yes No
Notes:		
	Software:	
	Is the software easy to use and suitable for the task?	Yes No
FURNITURE	Is the work surface large enough?	Yes No
	Is the surface free of reflections and glare?	Yes No
	Is the chair suitable and stable?	Yes No
	Do the adjustment mechanisms work?	Yes No
	Are you comfortable?	Yes No
Notes:		
ENVIRONMENT	Is there enough room to change position	Yes No

HEALTH	Whilst using the computer, have you ever suffered from:	
	Eyestrain?	Yes No
	Pain in the back/neck/shoulders?	Yes No
	Pain in the arms (elbows/wrists/hands)?	Yes No
	Pain elsewhere? (please specify)	Yes No
If the answer to an reported to the Sa	ny <b>health issue</b> above is YES, has this been afety Officer?	Yes No No
Has a doctor or O	ccupational Health been consulted?	Yes No
	•	
WORKING PRACTICE	Have you read the guidance and best practice advice for DSE users?	Yes  No
	Have you installed interruption software?	Yes 🗌 No 🗌
	Do you know who to ask for further advice?	Yes No
ACTIONS COMP User, Safety Office	LETED? er or Line Manager to sign below.	Yes   No
Name:	Signature:	Date:
,	For a self-assessment, the user should sign below ment is, to the best of my knowledge, an accurate workstation.	,
Name:	Signature:	Date:
REVIEW DATE (no	ormally, 12 months hence):	

,

#### **LIFTS**

There are two lifts on Downing Site: North Wing and South Wing, and three lifts at Bullard: in the IEEF, Wolfson Building and Brighton Building. **Do not use any lifts outside normal working hours**, or when there is no one else working in the building.

**Do not use any lift when the fire alarms are sounding**. Assistance in evacuation will be given if required. Do **not** use any lift 'out of hours' at night or weekends in case of breakdown and do not travel in a lift with any pressurised gas cylinders or with Dewars of cryogenic liquids or with bulk containers of hazardous substances. Our lift are regularly examined by Briteng.

#### **ENVIRONMENTAL IMPACT**

The Department Environmental Coordinators are Michelle Austin (Downing Site) & bullardfac@esc.cam.ac.uk (Bullard Labs and IEEF).

The University of Cambridge has an <u>Environmental Sustainability Vision</u>, <u>Policy and Strategy</u> setting out the University's commitment to achieving outstanding environmental sustainability performance. The Department of Earth Sciences fully complies with the University's Environmental Policy and, where it can, follows all environmental guidelines. The Department encourages staff, students and visiting researchers to play an active role in creating and maintaining a good working environment. Teaching, research and other activities are conducted with reference to current best practice and students also are encouraged to be aware of the environmental issues relating to their work and to use current best practice.

The following tips give some suggestions for how you can help.

#### Energy.

 Please switch off lights and equipment when they are not being used. A single light left on overnight over a year accounts for as much greenhouse gas as a car driving from Cambridge to Paris.



- Always dress appropriately for the season to reduce the need for additional heat or cooling.
- Where possible, use the stairs rather than the lift.

#### Food and drink

- Department mugs have been provided for use at coffee/tea times and for meetings, instead of plastic cups.
- University cafés have a range of sustainable options. (Why not try the vegan option? Did you know the biggest impact individuals can make around food is reducing meat and dairy intake?)
- All of the University cafes' disposable packaging (Vegware), as well as any food waste can be recycled in food waste bins.
- Glass jugs for meetings
- order food from sustainable University approved suppliers

#### Waste and recycling

- Reducing and reusing allows us to decrease the amount of waste that will need to be recycled. Think
  how you can achieve this by taking simple steps, such as printing double-sided, and only printing when
  really necessary.
- There are separate recycling facilities at the Downing Site and at the Bullard for food waste, glass, mixed recycling (paper, cardboard, plastic bottles, plastic containers, cartons, plastic wrapping, cans and tins), batteries, print cartridges etc. For further details, and info on other things we can recycle, please see the Recycling Facilities section.

#### Water

- Cambridge is in one of the driest areas of the country so saving water is particularly important here.
- Help save water by not leaving taps running.
- If you see a leak or a drip, report it to Charlie Aldous or Reception.

#### Get more involved

- Keep up-to-date with news and opportunities by subscribing to the Greenlines newsletter.
- Visit the <u>Environment and Energy Section's student webpage</u> to find out more about projects including Green Impact and the <u>Living Laboratory for Sustainability</u>.
- Email <u>environment@admin.cam.ac.uk</u> with any questions or to find out more about any particular opportunity.

#### **Recycling facilities**

- Look for the posters on or near the bins which say what should be placed in each.
- Brown Bins for food waste, heavily soiled food packaging/containers (plastic & paper)
- General Bins all other waste except for hazardous/electrical/clinical/Sanitary& Nappy disposal
- There are no food waste bins in labs as food should not be consumed in these areas.

	Downing Site	Bullard
Batteries	There is a collection point in the Reception area. Lithium and lead acid batteries are accepted but must be clearly labelled, and kept separate.	There are collection points at the Bullard – see Emma Chapman or bullardfac@esc.cam.ac.uk. Lithium and lead acid batteries are accepted but must be clearly labelled, and kept separate.
Envelopes	There is a collection point in the Reception area where large envelopes are stored for re-use.	Emma Chapman collects envelopes larger than A5. There is a box of these in the Post Room.
Printer and photocopier ink cartridges.  Mobile phones (Downing Site)	Inkjet cartridges (not Epson or compatibles), mobile and SMART phones, MP3 players and e-readers. Please ask Sylvia, or put these in the cardboard box in the corridor just past reception. Please seal any leaky cartridges in a plastic bag.	Waste toner cartridges are being collected again! Please put empty cartridges into the packaging the new cartridge came from, and put the used one into the marked box adjacent to the printer, or contact bullardfac@esc.cam.ac.uk
Computers and other IT equipment	Please contact the Computer office.	Contact bullardfac@esc.cam.ac.uk for all redundant computers and other IT equipment.
Compact fluorescent tubes and bulbs	Please contact Charlie Aldous.	Please contact bullardfac@esc.cam.ac.uk
Electronic and electrical waste (not computers)	Please contact Chris Parish.	Please contact bullardfac@esc.cam.ac.uk

#### **INSURANCE**

A full statement of the University Insurance is given at University Insurance

University Departments can buy insurance for specific items of equipment and special arrangements can be made where equipment is being taken for use in the field etc. To arrange cover please contact Alison Cook (bom@esc.cam.ac.uk) and the Insurance Section stating the items to be insured and their value, allowing time for this to be processed. The University Insurance does not cover private work in any way.

The University has Public Liability insurance, which covers the actions of employees and students of the University whilst they are engaged on University business. The cover is worldwide although the policy will only respond to claims brought under English Law. To obtain a letter confirming cover for employees or students making work related visits to other organisations, please contact the Insurance Section with information about the visit and confirmation from the Department that appropriate risk management is in place.

If your study/work requires you to engage in hiking, diving or other high risk activities, please provide a copy of your risk assessment to the Insurance Section so that cover can be arranged.

**Sabbatical Leave** - If you travel abroad to carry out University activities or research, attend a meeting or conference where you are representing the University during a period of sabbatical, you are entitled to use the University travel insurance. However, the policy will not provide cover for overseas travel unless the reason for visiting the country is necessary to the work being undertaken for the University, e.g.:

- location of conference or seminar
- meeting with overseas research collaborators
- visiting local library, archives, archaeological dig, etc.
- interviewing or taking samples from local population

Cover is subject to departmental authorisation and a risk assessment taking into account the risk of Covid infection.

#### **Travel Insurance**

Please refer to Government guidance regarding to Covid-19 before booking any <u>local</u> or <u>international</u> travel.

University employees and registered students travelling abroad on university business can apply for travel insurance. Full details can be found here

**Undergraduate Students** - From 1 August 2022, undergraduate students can be covered by the University's travel insurance policy. Trips must be authorised and risk assessed by the relevant department in the usual manner.

**Activities Covered** - The policy only provides cover for the usual business activities of the University. Leisure and sporting activities, winter and water sports, rock climbing, paragliding, wind surfing, sailing, horse riding and other activities which increase the risk of injury are not covered by the policy and separate personal travel insurance should be arranged for these.

This travel insurance does not provide any motor insurance. If you borrow, hire or buy a vehicle abroad you must arrange local, fully comprehensive motor insurance.

Travel insurance will be invalid without an approved risk assessment for trips. Cover certificates are issued by an automated system rather than the underwriters at the insurance company. Cover is always subject to departmental authorisation and risk assessment as well as the usual proviso that the Insured (the University) and the Insured Person (the traveller) shall take all reasonable precautions to prevent accidents and any injury, loss, destruction or damage and shall take all reasonable steps to observe and comply with statutory or local authority laws, obligations and requirements.

Travel insurance is arranged for all supervised Department fieldtrips outside the UK for staff, undergraduates and volunteer workers.

New research students carrying out fieldwork <u>before</u> they are registered or matriculate as research students of Cambridge University must also arrange their own insurance.

When students or staff provide their own insurance cover, they are advised to check the wording, and particularly the exclusions, to ensure that it meets their requirements.

To apply for cover from 22 September, please go to <a href="https://travelcert.aig.com">https://travelcert.aig.com</a>. You will need to set up a user profile using your @CAM email address.

Further details for Fieldwork Safety are given in the Fieldwork section.

## **FIELDWORK**

Planning for all fieldwork, including academic research trips, must include arranging **insurance**, writing a **field risk assessment** and giving **contact** details for those going on the trip from the Department. Those going abroad would be well advised to consult the UK Government <u>Foreign and Commonwealth Office</u> for travel advice relating to their specific country, or <u>UK areas</u>. Fieldwork abroad also needs a contact in the host country to comply with BS 8848 regulations.

#### **Fieldwork Risk Assessments**

Templates can be downloaded from the University webpages, specific to your needs:

Low Risk (includes conferences and lab visits) to be sent to travel@esc.cam.ac.uk
Appendix 3a - Low Risk (Basic) Travel Assessment Form - Students

Appendix 3b - Low Risk (Basic) Travel Assessment Form - Staff

Medium Risk (suitable for most Fieldwork) to be sent to safetydocs@esc.cam.ac.uk

Appendix 4a - Medium Risk (Standard) Travel Assessment Form - Students

Appendix 4b - Medium Risk (Standard) Travel Assessment Form - Staff

High Risk (not recommended, only if unavoidable) contact DSO Maryline Vautravers. Appendix 5a - High Risk (Elevated) Travel Assessment Form - Students

Appendix 5b - High Risk (Elevated) Travel Assessment Form - Staff

#### Examples in each category are available

Please complete the appropriate form. If you are a student, please discuss the form with your supervisor and ensure they have agreed by signing your form. Students should then make three additional copies and give one to their College Tutor, one to their supervisor and one to Maryline Vautravers/Michelle Austin. Staff should make one copy and give it to Maryline/Michelle.

Those planning overseas fieldwork may find it useful to speak to others who have been to a similar area before, to find out what safety precautions they took. If you are interested in doing this, please contact the safety team. Copies of this information must be given to the Department Safety Officer, Maryline Vautravers, or Safety Administrator, Michelle Austin, and the student's supervisor and College Tutor (if an undergraduate or research student). Students must also have these documents agreed by their supervisor. Supervisors are responsible for seeing these are in place at the planning stage for all their Part II and III students' field mapping projects and for their research students as well as for their own fieldwork. In order to attend a field course, undergraduate fieldtrip participants must complete and return the confidential safety/medical form to reception together with payment for the trip. You must also read the Fieldwork Code of Safe Practice and Good Conduct.

The Department now has a dedicated email address <a href="mailto:travel@esc.cam.ac.uk">travel@esc.cam.ac.uk</a> so that all department members can send details of any short term 'work away' not covered by our existing travel risk assessment processes. This system is for low-risk travel only i.e., where the activity is similar to that encountered doing low risk work at Cambridge (e.g., office work, attending lectures etc), other activities should be covered by travel risk assessments and sent to <a href="mailto:safetydocs@esc.cam.ac.uk">safetydocs@esc.cam.ac.uk</a>

When completing the forms, you will be providing us with personal information. You can find GDPR Information on how we use your personal data here:

<u>General Information</u>

<u>Students</u>

Staff

#### **Fieldwork Insurance**

All our UK and overseas-taught field courses have personal accident cover with Allianz Insurance. For individual fieldwork cover is not automatic; travellers must **apply on a trip by trip basis** on the TravelCert platform.

Please refer to University Guidance for eligibility and terms and conditions.

Always check the wording of your insurance policy, particularly the exclusions, to ensure that it meets your requirements. Students must indicate on their field risk assessment what insurance arrangements they have made.

# **Fieldwork Safety Training**

Annual Field Safety Review for Field Course Leaders - Tuesday 3<sup>rd</sup> October 2023

'Planning your Mapping Project Safely' for future Part IIs.

&- 'Part III Project Safety Induction' for future Part IIIs. Anticipated late February 2023, dates & timings to be confirmed.

Friday 14th June 2024 tbc - Fieldwork Safety and First Aid Training Seminars: -

IA Earth Scientists continuing with GSA/GSB next year and attending the Sedbergh Field Course 4.hrs, 2pm to 6pm

IB Earth Scientists continuing to Part II and attending the Skye Field Trip and their Mapping Project 4.5 hrs, 9am to 1.30pm

Outdoor Fieldwork First Aid courses for relevant leaders, demonstrators and research students.

3 day Course Tuesday January 9th to Thursday January 11th 2024 tbc

2 day Course Wednesday May 1st to Thursday 2nd May 2024 tbc.

## **Driving on Fieldwork**

Drivers on fieldwork, whether using University vehicles, hire vehicles or their own car, must be suitably qualified and deposit a copy of their driving licence and relevant documents with Michelle Austin. They must also complete the relevant Department driving forms (see Driving at Work). Drivers on taught field courses take Advanced Driver Training. Stringent regulations exist for driving vehicles carrying undergraduates, so if you will be driving on a fieldtrip please contact Charlotte Kenchington or Michelle well in advance.

#### **Family Members on Field Trips**

The Department's policy on the presence of family members on Department field trips balances the requirements of health and safety legislation and the maintenance of academic standards with the legitimate need, in exceptional circumstances, for family members to accompany field trip participants.

- 1. In general, the presence of families is discouraged. Exceptional circumstances could include, for example, nursing mothers.
- 2. Family members cannot be considered in any way to be part of the field trip and are wholly the responsibility of the member of the Department concerned. Childcare facilities are solely the responsibility of the member concerned.
- 3. They may, in exceptional circumstances, stay in the same accommodation as the field trip members, but the cost of their accommodation must be paid for separately.
- 4. Agreement to the presence of family members must be obtained in advance from both the course leader and the Department Safety Officer. An appropriate risk assessment must be made before permission can be given.
- 5. The contents of the risk assessment for the accommodation must be brought to the attention of, and discussed with, all concerned.
- 6. Children must be kept under parental supervision at all times without exception.

#### Fieldwork Code of Safe Practice and Good Conduct 2023-2024

This document is available from the Safety Pages of the Department website.

#### **Undergraduate Field Courses**

#### The following safety guidance should be adhered to:

- (a) All **drivers** of vehicles on our field courses will be asked to take the advanced drivers training course, particularly where drivers will be transporting students. Only those drivers who have successfully taken the course in the previous three years will be allowed to transport students.
- (b) All **students** will be asked to read, sign and return the Department's safety statement before going on all our field courses, also indicating medical conditions, which should be taken into account, e.g. epilepsy, diabetes etc. All students going to Sedbergh or Skye will be issued with the "Safety on Mountains" booklet. Students going to Arran will receive a Fieldwork Safety booklet.
- (c) All **field guides** must include a section on safety, and field course leaders must underline aspects of safety at the beginning of their courses and as appropriate during the course.
- (d) At a meeting of demonstrators before each course, the whole issue of safety on field courses must be emphasized.
- (e) All field course leaders and demonstrators must have appropriate first aid training. Applied First Aid runs 2/3 day Outdoor First Aid for Fieldwork courses for the Department, which cover essential skills. All field trip leaders, and as many demonstrators as feasible, are advised to undertake this training. Undergraduates receive fieldwork safety and first aid training in June before their Cumbria and Skye Field Courses. Those undertaking Part II Mapping Projects also attend a Safety Seminar covering field safety and preparation of their field risk assessments scheduled for Feb/Mar 2024 tbc.
- (f) Field course **leaders** should arrange that there is a demonstrator at the rear of each party to ensure there are no stragglers.
- (g) For the Arran field course, multiple copies of the student lists should be arranged so that each day each party leader has a ticked list of students in his group for roll calls during the day as necessary.
- (h) All students must be advised verbally and in handouts about footwear and clothing for field courses.
- (i) All courses must have first aid kits and hard hats.
- (j) On the mapping course a seminar on safety in the field and field training must be given in preparation for the Part II Mapping Project.
- (k) A checklist of safety guidelines must be prepared for the leader of each course.
- (I) There will be a **Safety Log Book** for each field trip. This will be written up on a daily basis, recording the time and contents of safety briefings, together with any incident, accident, or near miss, which has occurred. Books will be kept from one year to the next so that any potential hazards can be rectified. The person responsible for keeping the log during the trip will be a demonstrator nominated by the trip leader, but will not be the leader him/herself. At the end of the trip, a feedback form will be completed by the field trip leader, and this and the logbook is returned to the Department Safety Officer (N014) or the Safety Administrator's office (N014) for reporting and investigations of incident and safekeeping.

- (m) Details of a contact in your area or host country must be included on your risk assessment for all fieldwork.
- (n) For overseas field trips in particular it is essential to have emergency contact numbers in the host country. This could also include local travel representatives, hospitals, traffic/tourist police, airline customer services, your hotels, and car hire. Field trip leaders are often well placed to provide this additional information.

# **DRIVING AT WORK**

The Department must comply with current DVLA driving legislation and work within the University Health & Safety Office's policy statement and guidance for Travel at Work (HSD031M).

**Driving on University Business** includes drivers using Department vehicles, hire vehicles or their own vehicle including bicycles. If you have any queries, or wish to drive on field trips, please contact Michelle Austin or Charlotte Kenchington, respectively.

- All journeys are restricted to bona fide University/Department business. These could include, but are not restricted to, travel between University buildings, research fieldwork, visits to other academic institutions, collection of items purchased for the Department, transportation of Earth Sciences casualties to hospital.
- 2. In order to drive any vehicle on University business, drivers must be suitably qualified and show their full driver's licence to Michelle Austin (Downing Site) or bullardfac@esc.cam.ac.uk (Bullard) each year. A copy of the licence will be retained on secure file. The Department requires all drivers to complete the driving forms, including a generic risk assessment, which covers them for regular journeys. It is the driver's responsibility to notify the Department of any changes, such as endorsements, pending prosecutions, accidents or relevant changes to medical conditions, and the Department will usually ask drivers for online access to their DVLA driving record before driver training and/or driving on field trips. Where extra hazards apply, such as driving alone ('lone working') or medical issues, an individual risk assessment should also be completed.
- 3. University insurance does not cover hire vehicles. Insurance must be taken out with the vehicle provider. (Vehicles for regular undergraduate field courses are dealt with separately.)
- 4. Anyone wishing to use their **own vehicle** must also complete a form showing that their insurance policy covers **business use** for them and their passengers, that their vehicle is taxed, and has a current MOT (if the vehicle is over 3 years old), and that their car has been regularly serviced. Cyclists must have personal liability insurance and regular maintenance to show their bike is roadworthy.

If you drive your own vehicle on University business (which includes driving between sites and attending conferences) your own insurance policy must cover you, and any passengers, for travel on your employer's business, ie 'business use', in addition to "social, domestic and pleasure and travel to and from place of work'. If this is not the case, you will be driving illegally, whilst uninsured, as you are not covered by the University insurance policy. Any mileage claims can only be paid if business insurance use cover has been obtained. Although insurers rarely charge extra for occasional business use, the mileage rate paid includes an element towards insurance costs.

- 5. For fieldtrips, and other journeys where any **undergraduate students** are carried as passengers, drivers must:
  - have satisfactorily completed a recognised Advanced Driver Training course
  - be over 21 years of age if driving in UK
  - be over 25 years of age and at least post-doctoral status or equivalent if driving abroad
  - have driving experience within the U.K. for at least 2 years (or equivalent experience abroad if the trip is outside UK).

**Minibus** drivers are required to comply with DVLA requirements and should have:

- no driving convictions other than one speeding offence
- no involvement in a motor accident in the last 3 years

Time expired convictions are disregarded.

DVLA requires a D1 category on a full British licence to drive a minibus. (People carriers with 5-8 passengers do not have this D1 requirement.)

Field risk assessments apply to driving on **field trips**, but drivers must also complete an individual risk assessment if extra hazards apply (see 2 above).

- 6. In special circumstances, with the agreement of the Head of Department, a driver who does not meet all the above criteria may be allowed to drive a hire vehicle, after an individual risk assessment has been made, recorded in the fieldtrip logbook and signed by the Field Trip Leader.
- 7. All driving for the Department is done on a purely voluntary basis. No one will be required to drive if they are unwilling to do so.
- 8. For drivers of minibuses, the Department has a number of "Section 19" minibus permits, which should be displayed in the front windscreen during each journey. This applies both to University-owned and to hired minibuses.
- 9. Where a casualty is being taken to the doctor/hospital, a University First Aider should, where possible, accompany him/her. An ambulance must be called if there is any doubt about transporting a casualty safely.
- 10. In the event of an accident involving a University vehicle, drivers must follow University procedure, a copy of which is kept in each vehicle.
- 11. All accidents occurring while on University business, whether in a University vehicle or another vehicle must also be reported as soon as possible to Charlie Aldous or Maryline Vautravers (Downing Site), or bullardfac@esc.cam.ac.uk (Bullard Labs), and a University Incident Report completed.
- 12. Drivers may be considered to need further training due to inexperience and any breach of policy or rules may lead to withdrawal or suspension of any driver's authorisation to drive for the Department or University.
- 13. Equipment left in unattended vehicles is not covered by the University's insurance; special arrangements should be made where equipment is being taken for use in the field etc.

Relevant risk assessments for driving on University business can be supplied by Michelle Austin on request.

#### **Department Driving Protocol: Bullard Vehicle**

During the Covid-19 pandemic, there must be a 72-hour gap between Department car bookings. Please follow Government advice when using the Department vehicle.

**Contacts:** bullardfac@esc.cam.ac.uk (for bookings, maintenance, repairs, faults)

 Before using a Department car, you must produce your driving licence and a copy of the online DVLA driving record should be provided, which can be kept on file by the Bullard Safety Officer. Your licence will be checked annually but you must notify him of any speeding convictions or other motoring offences occurring in the meantime.

- Bullard Labs vehicles may be booked via bullardfac@esc.cam.ac.uk office where you also make
  arrangements to collect the keys; you must log journey details when you return the vehicle,
  entering outward and return mileage and specifying which grant is being used. Tell
  bullardfac@esc.cam.ac.uk of any faults with the car and of any adjustments/repairs, you made.
- Vehicle details are given below and you should comply with these as a condition of use.
- Personal motor insurance does not provide cover for University vehicles.
- If you ever need to transport chemicals in the Department car, strict guidelines must be followed: please contact bullardfac@esc.cam.ac.uk or 37198).
- All vehicles must be returned in a clean condition. Muddy boots must not be used in the vehicles.

#### PEUGEOT ESTATE X915 GEB:

# Please familiarise yourself with the controls etc. before driving this car and return it CLEAN with the tank at least half full!

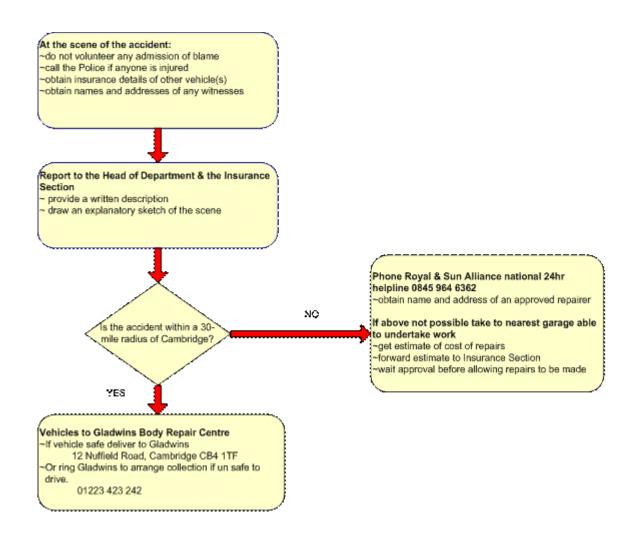
- The handbook is in the driving door pocket p.3 gives dashboard info "at a glance"
- This car runs on diesel
- To start the engine DO NOT DEPRESS THE ACCELERATOR. Turn the key 2 notches; if the engine is warm enough the pre-heat light does **not** come on and you can start immediately. If the pre-heat light comes on, wait for it to go out before operating the starter.
- The filler cap is opened by using the lever to the RH of the driving seat.
- A copy of the insurance certificate (+ University guidelines in the event of an accident) and the AA card are in the car.
- Remote locking is activated by using the button on the ignition key small unlocks, large locks. You can also use the key in the lock in the normal way.
- Details of controls on steering wheel stalks are on p.7 of the handbook.

#### **Booking Vehicles**

If you need to collect keys out of working hours or at a weekend, please make arrangements with <a href="mailto:bullardfac@esc.cam.ac.uk">bullardfac@esc.cam.ac.uk</a>, otherwise you may not be able to get it. Allow time in your booking to clean the vehicle when you return it.

### **Use of Vehicle**

- You may buy fuel at any filling station using the euroShell Card (a pin number is supplied) which is given to you with the keys. Please ask for a receipt. You may be asked for the registration.
- Please fill details on the mileage slip and leave with keys on your return.
- Familiarise yourself with the car's operation. Before driving it: look at the tyres, note bodywork
  damage and check lights, indicators, windscreen washer bottles, wipers, and seat belts. If you
  have any doubts about roadworthiness, do not use! Do not do repairs yourself: if you must make
  a temporary repair have the work checked by a garage as soon as possible, especially if safety
  could be affected.
- If you are involved in an accident, follow the procedure shown below, a copy of which is in the door pocket along with the insurance certificate. You must complete an insurance accident form that you can get from bullardfac@esc.cam.ac.uk.
- Any accidents and claims on Department vehicles may affect your own vehicle insurance. You
  are responsible for any fines imposed for any traffic or parking offences.



Chipped or broken windscreens (UK only): Royal & Sun Alliance has a special 24-hr arrangement for the repair of all windscreens with Autoglass Windshields, Unit 2, Elizabeth Way, Cambridge (01223 461890). If the vehicle is outside the Cambridge area, telephone the Autoglass Helpline on 0800 363636 for details of the nearest repairer. A copy of the vehicle insurance certificate **must be produced** at the time of repair. There is no policy excess for windscreen repair. Autoglass will invoice Royal & Sun Alliance direct for the cost of repairs.

#### **Returning Vehicles**

For other than local journeys, before you return a vehicle – please

- Put it through a car wash and clean out the interior. No muddy boots in vehicle.
- Leave the tank at least half-full make a special journey if necessary.
- Remember to return the keys, fuel card and mileage slip. Evenings and weekends post them
  through letter box at front of Wolfson building and inform bullardfac@esc.cam.ac.uk or Emma
  Chapman by email.

# **SECURITY**

University or College ID Cards should be carried at all times and made available upon the request of Security and Department personnel.

If you have not received a card, or have mislaid, damaged or have any other problem concerning your University card, contact Charlie Aldous (33476) or Alison Cook for Downing Site, or Emma Chapman (37191) for Madingley Rise, who will contact the Card Office.

A card entry system is fitted on the Main Entrance inner doors, the East Wing door and the Museum side door on the Downing Site. All entrances to the buildings at Madingley Rise have proximal card readers.

All visitors to the Department must sign using the Department sign in system. If you see someone you do not recognise or 'looking lost' you have every right to ask who they are and offer help. Ask them who their supervisor is, or who they are looking for. Do not attempt to challenge anyone aggressively, as you could put yourself or others in danger. If possible, make a note of their appearance and the time that you saw them, and report this to Charlie Aldous for Downing Site or the Bullard Safety Officer, at bullardfac@esc.cam.ac.uk (37198) for Bullard Labs. If in doubt, contact Security on 31818.

#### Keep all rooms locked when unoccupied.

#### **Valuables**

Do not keep money or valuables in the Department. The building is large and it is relatively easy for an outsider to enter undetected. Do not leave bags or packages unattended, as they will be treated as suspicious. If you receive a suspicious package through the post, do not attempt to open it, but contact Security immediately.

If you see anything suspicious, whether a person, unattended package or bag, or anything else that gives you cause for concern, contact Charlie or for Bullard, bullardfac@esc.cam.ac.uk. Out of hours, call Security (31818).

#### **Suspected Theft**

If something goes missing in the Department and you suspect it has been stolen, report it immediately to Charlie Aldous or for Bullard, bullardfac@esc.cam.ac.uk, who will assist you in filling out a Missing Items Report.

Out of hours, report the loss directly to the police and obtain a crime number; report the incident to Charlie or for Bullard <a href="mailto:bullardfac@esc.cam.ac.uk">bullardfac@esc.cam.ac.uk</a> as soon as possible.

If there appears to have been a break-in or damage to the area, then also report the incident to Security, so the area can be made secure.

Please note that the University Insurance does not cover private items.

There are now regular security patrols on both sites at night and vehicles must not be left overnight without clearing it with Charlie or for Bullard bullardfac@esc.cam.ac.uk in advance.

# **HEALTH AND SAFETY LAW (HSE)**

# How to raise a Health and Safety concern

Anyone who wishes to raise a health and safety concern should speak in confidence Maryline Vautravers (<a href="mv217@cam.ac.uk">mv217@cam.ac.uk</a>) or for Bullard, bullardfac@esc.cam.ac.uk. For matters relating to IEEF, please contact Sharada Crowe (sharada@IEEF.cam.ac.uk).



# **Health and Safety Law**

What you need to know



This is a web-friendly version of the Health and Safety Law leaflet published 04/09 All workers have a right to work in places where risks to their health and safety are properly controlled. Health and safety is about stopping you getting hurt at work or ill through work. Your employer is responsible for health and safety, but you must help.

#### What employers must do for you

- Decide what could harm you in your job and the precautions to stop it. This is part of risk assessment.
- 2 In a way you can understand, explain how risks will be controlled and tell you who is responsible for this.
- 3 Consult and work with you and your health and safety representatives in protecting everyone from harm in the workplace.
- 4 Free of charge, give you the health and safety training you need to do your job.
- 5 Free of charge, provide you with any equipment and protective clothing you need, and ensure it is properly looked after.
- 6 Provide toilets, washing facilities and drinking water.
- 7 Provide adequate first-aid facilities.
- 8 Report major injuries and fatalities at work to our Incident Contact Centre on 0345 300 9923. Report other injuries, diseases and dangerous incidents online at www.hse.gov.uk.
- 9 Have insurance that covers you in case you get hurt at work or ill through work. Display a hard copy or electronic copy of the current insurance certificate where you can easily read it.
- 10 Work with any other employers or contractors sharing the workplace or providing employees (such as agency workers), so that everyone's health and safety is protected.

#### What you must do

- 1 Follow the training you have received when using any work items your employer has given you.
- 2 Take reasonable care of your own and other people's health and safety.
- 3 Co-operate with your employer on health and safety.
- 4 Tell someone (your employer, supervisor, or health and safety representative) if you think the work or inadequate precautions are putting anyone's health and safety at serious risk.

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Health and Safety Executive

#### If there's a problem

- 1 If you are worried about health and safety in your workplace, talk to your employer, supervisor, or health and safety representative.
- 2 You can also look at our website for general information about health and safety at work.
- 3 If, after talking with your employer, you are still worried, you can find the address of your local enforcing authority for health and safety and the Employment Medical Advisory Service via HSE's website: www.hse.gov.uk.

#### Fire safety

You can get advice on fire safety from the Fire and Rescue Services or your workplace fire officer.

#### **Employment rights**

Find out more about your employment rights at www.gov.uk.

#### Further information

This leaflet is available at www.hse.gov.uk/pubns/books/lawleaflet.htm. The information in this leaflet is available in a number of formats.

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