

DEPARTMENT OF GEOLOGY

GENERAL HEALTH AND SAFETY POLICY

1. Introduction

- 1.1. The University is subject to Health and Safety requirements in order to control hazards which are present within the University. As part of this process, the Department is required to develop a Health and Safety policy so as to ensure safe behaviour during Departmental activities. This policy applies to all students, contractors, visitors and volunteers of the University.
- 1.2. Health and Safety issues within the University are overseen by the University Health and Safety Team. Areas designated laboratories are overseen by the University Laboratory Manager (Dr Wayne Temple).
- 1.3. The Departmental Health and Safety Officer is Mike Trinder. His responsibilities include maintaining the Departmental Hazard Register, which identifies hazards within the Department. He acts as a monitor of the application of the Health and Safety policy within the Department, and reports directly to the HOD and to the University H & S Team. Mike represents the Department on University H & S Committees, etc. He is also responsible for ensuring that any accidents that do happen within the Department (or during departmental activities) are reported, using the appropriate report forms.
- 1.4. The Departmental Laboratory Manager is Damian Walls. He oversees the various designated laboratory areas and checks that individual laboratory supervisors are maintaining correct H & S procedures within their respective areas, including the training of laboratory users, and the correct recording, storage and disposal of all chemicals used.
- 1.5. Individual laboratory and workshop areas have designated supervisors. These supervisors are required to provide training as appropriate for all users of these areas, to ensure that correct H & S procedures are in place and are followed, and in the case of restricted laboratories, to maintain a register of appropriately trained personnel who are permitted to use the laboratory.
- 1.6. All chemicals used in the Department are to be purchased through the correct channels, stored and used under strict safety procedures, and disposed of in approved manner. Laboratory Supervisors are responsible for

ensuring these procedures are followed, under the general direction of the Laboratory Manager.

- 1.7. Some areas are designated "HSNO Exempt laboratory". These come under strict operational guidelines which must be followed. Other areas are designated workshop areas and again strict operational procedures are in place. Other areas designated teaching have fewer specific restrictions other than general care and attention.
- 1.8. The Department Health and Safety Policy is constantly under review and will be updated from time to time as circumstances change.

2. General

- 2.1. The Geology Department is an old building. As a result, there are a number of potential hazards that may arise. The Department will endeavour to identify and control against these.
- 2.2. Fire hazard is important in an old building. Fire wardens are appointed for the whole building, under the general direction of the Health and Safety Officer. Fire drills will be held at least twice a year, and the fire alarm will be tested at intervals. Lecturers are responsible for ensuring the safe evacuation of their classes in the event of an emergency. To this end, clear signage will be displayed in lecture theatres and teaching areas (or the relevant authority notified). Flammable chemicals must only be used in designated areas where there are procedures set out for their use. Storage is in appropriate fireproof containers as approved by the University.
- 2.3. Rocks are heavy materials. Carrying large rocks and other heavy objects around the Department, especially up and down stairs, should be carried out with care and caution. Certain areas such as laboratories, workshops and some teaching areas are designated "CLOSED FOOTWEAR AREAS". Wearing of open-toed footwear such as jandals or sandals in these areas is not permitted.
- 2.4. All electrical appliances will be inspected at regular intervals by a competent person (see HS/N2S3760:2003) or registered electrician as required by the University Health and Safety regulations. No interference with or rewiring of any electrical appliance other than by a registered electrician is permitted. No unauthorized electrical appliance may be connected to the departmental electrical supply.

3. Hazardous Substances and HSNO Exempt Laboratories

- 3.1. Many common laboratory chemicals are considered 'Hazardous Substances', under New Zealand legislation and the use of these is strictly regulated by the HSNO (Hazardous Substances and New Organisms) Act (1996) and associated regulations, which are administered by ERMA (The Environmental Risk Management Authority).
- 3.2. A specific part of this legislation, the 'Hazardous Substance (Exempt Laboratories) Regulations (2001)', covers the small-scale use of hazardous substances in research and teaching. Laboratories that operate under this legislation are designated 'HSNO Exempt Laboratories'.
- 3.3. All work in these laboratories must be carried out in accordance with the requirements of the ERMA approved 'Code of Practice for CRI and University Exempt Laboratories'. Each laboratory has a Supervisor who oversees use of the laboratory, provides appropriate training to all staff and students who wish to use the laboratory, and maintains a register of trained users. Each supervisor is responsible for ensuring the correct recording, usage and disposal of chemicals within the laboratory. Access by non-registered personnel is not permitted except for the purposes of training or while accompanying the supervisor. No children are allowed in Exempt Laboratories except as part of an instructional group under close supervision and with the Laboratory Supervisor present. The laboratories must be kept secure and not left open after-hours. After-hours access is restricted to registered graduate students and staff.

4. Workshops

- 4.1. Workshops (e.g. the Thin Section suite) are areas which do not qualify as exempt laboratories but which contain hazardous equipment and machinery and are subject to stringent Health and Safety operating procedures. All users must be registered and must follow the safety procedures as set out for each workshop and displayed prominently in each area.
- 4.2. Each area has a nominated Supervisor who is responsible for providing appropriate training to users and maintaining a register of trained users. Only registered users are permitted access to the workshop except for the purposes of training or in the company of the Supervisor. No children are allowed in the workshops except as part of an instructional group under close supervision and with the Laboratory Supervisor present. The workshops must be kept secure and not left open after-hours.

5. Supervised Field Classes

- 5.1. For each field class, or group of related field classes, the staff members responsible will draw up a hazard management plan prior to the class. This will identify likely hazards and provide procedures for minimizing risk. The plan will be approved by the HOD and circulated to all student participants before departure, or alternately presented to them at a pre-trip meeting. All participants will be required to sign a form to say that they have been provided with the plan or attended a presentation, have read and understood it and accept it.
- 5.2. Field classes in Geology will have sufficient supervisors to ensure safety. A general guide is one supervisor to ten students although this may be reduced for large 100-level classes visiting pre-organised sites.
- 5.3. Only authorized University vehicles (including vehicles hired by the University from a legitimate provider) will be used for formal field classes. Private vehicles will not be used. If students wish to use their vehicle to travel to and from a field class, they must get approval from the field class leader and sign a form to say that they will be responsible for making their own way to and from the class, so that the class will commence from their arrival and end at their departure.
- 5.4. All drivers of University vehicles must be approved by the HOD or by the Departmental Administrator, have a correct license and sufficient experience, and sign a statement to say they have read and agree to certain conditions. Conditions for driving vehicles include adherence to road regulations such as speed limits, consumption of alcohol, etc., knowledge of and adherence to the Road Code, and complying with instructions from the field class leader. The field trip leader must ensure that drivers are not suffering from tiredness and sufficient breaks are built into the schedule.
- 5.5. Any field work carried out along the sides of roads must be signaled by use of appropriate traffic warning devices as provided by the Department. Supervisors will ensure that students understand the hazard and are appropriately behaved and meet the requirements of a traffic management plan.
- 5.6. Fieldwork carried out in quarries or mines, or beneath high rock faces, requires provision and wearing of hardhats; these will be provided by the Department.

- 5.7. Geological hammers should be used on hard rocks with great care, especially if other party members are around, and safety spectacles must be worn.
- 5.8. First Aid kits and emergency kits will be carried in vehicles, and a Departmental cell-phone will be available where applicable.
- 5.9. Alcohol must not be consumed during field classes, except under supervision and where provision is made in the Field Trip management plan. Under no circumstances must alcohol be consumed in vehicles.

6. Independent field work at undergraduate level

- 6.1. Each student will discuss their field programme with a staff supervisor and complete a fieldwork plan. This will include identification of possible hazards and hazard control procedures to be followed.
- 6.2. Hazard warning devices will be used where working along highways, hardhats should be worn when working beneath faces, and eye protection while using hammers.
- 6.3. The Department will provide transport for a return trip to a field area. Alternatively the student may use public transport. If a student chooses to use their own vehicle, they must sign a form indicating this is their choice, and accepting responsibility for its operation.
- 6.4. Where fieldwork is in remote areas, a field companion must be taken. Provision of such a field assistant must be demonstrated before a project will be approved. In all fieldwork, notification of planned work and routes must be given to a suitable person each day, and that person notified when the day's work is completed. During any work in remote areas where daily contact with others is difficult, a daily plan must be left at base or in a vehicle, and some form of communication such as an emergency beacon or mountain radio carried.
- 6.5. Students must satisfy their supervisor that they possess the skills necessary to work in the chosen field area, and they have the necessary outdoor clothing and equipment.

7. Independent fieldwork at graduate level

- 7.1. The key issue in fieldwork during graduate research or by staff is to discuss thoroughly the logistics of proposed fieldwork with colleagues or supervisors

and to identify any possible hazards and to develop mitigation procedures and fieldwork planning to minimize risk.

- 7.2. Both staff and students must make sure they and their companions have the necessary skills to handle the expected conditions.
- 7.3. An intentions form must be completed and left with the Department Administrator before leaving for each period of fieldwork. In all fieldwork, notification of planned work and routes must be given to a suitable person each day, and that person notified when the day's work is completed. During any work in remote areas where daily contact with others is difficult, a daily plan must be left at base or in a vehicle, and some form of communication such as an emergency beacon or mountain radio carried. Where fieldwork is in remote areas, a field assistant must be taken.
- 7.4. All researchers must make sure they carry adequate equipment and clothing for the fieldwork they are undertaking, and not put themselves into hazardous situations beyond their level of skill. In some instances where work in a particular area is essential, the Department will arrange for extra training or provision of an experienced field assistant if the researcher lacks this.
- 7.5. Graduate students and staff may use Department vehicles (or hired vehicles) for fieldwork. They must have a clean and current driver's license and sufficient experience for the conditions, and satisfy their supervisor and the Departmental Administrator of this. They should sign a form provided by the Departmental Administrator providing details of their license, etc., and accepting conditions for use of University vehicles. If they choose to use their own vehicle, they must sign a form indicating this is their choice, and accepting responsibility for its operation.
- 7.6. Use of boats is subject to the University regulations regarding use of boats, and any proposal to use a boat should be discussed with the Departmental Boat Officer (Brent Pooley).