# **Department of Geology, University of Otago**

## General Health and safety policy

#### 1. Introduction

- 1.1 The Health and Safety at Work act (2015) (HSWA) requires the university of Otago to identify and control hazards within its operating environment. This policy applies to staff, students, contractors, volunteers and visitors at the university.
- 1.2 The rules that manage hazardous substances and organisms that may affect human health and safety (H&S) in the workplace were transferred from HSNO to the Hazardous Substances Regulations under HSWA from December 2017.
  <a href="http://www.legislation.govt.nz/regulation/public/2017/0131/latest/DLM7309401.html">http://www.legislation.govt.nz/regulation/public/2017/0131/latest/DLM7309401.html</a>
- 1.3 The University of Otago, Health & Safety Compliance team oversee the management of all health and safety issues

  https://www.otago.ac.nz/health-safety/index.html
- 1.4 The Department Health & Safety Officer (DHSO) for Geology is Ray Marx <a href="mailto:ray.marx@otago.ac.nz">ray.marx@otago.ac.nz</a> He monitors the application of the HSWA (2015) within the Geology Dept, and reports directly to the Head of Department (HOD) and to the University of Otago, Health & Safety Compliance team. He also maintains the department hazard register, ensuring that any accidents/incidents/near misses that occur are correctly recorded and investigated.

#### 2. General Observations.

- 2.1 The Department of Geology inhabits a very old 'heritage' building (constructed 1873). While this can be charming for visitors, a number of potential hazards arise.
- 2.1.1 Fire hazard is high in such an old structure. **Fire Wardens** are appointed for each floor and fire drills are held at least twice a year. Lecturers are responsible for ensuring their class is safely evacuated to the **Assembly Area** in the **Quadrangle**.

- 2.1.2 Hallways and exits must be kept clear. Do not collect rubbish, packaging, equipment or furniture in any of these spaces.
- 2.1.3 Flammable chemicals may only be used in specified areas and stored in fireproof containers and enclosures as approved by the university.
- 2.1.4 The Geology building has been divided into a number of 'fire' cells, separated by self-closing, or closed, fire doors. These doors must not be held open by objects, such as rocks, furniture or fire extinguishers.
- 2.2 All electrical appliances will be **inspected and tagged** at regular intervals by a competent person (HS/N2S3760:2003) or a registered electrician. Electrical appliances may not be modified other than by a registered electrician. No unauthorised appliances may be connected to the Department of Geology electricity supply.
- 2.3 Rocks are heavy materials. Carrying rocks and other heavy, or awkward objects around the building and between floors should be approached with care. Use the Lift at the north end of the building if possible.

### 3. <u>Hazardous Substances (HSNO-Exempt) Laboratories.</u>

- 3.1. The University of Otago *laboratory Manager* is Prof. Lyall Hanton while the H&S office provide two *Laboratory H&S Advisers*, Martin Bainbridge <a href="martin.bainbridge@otago.ac.nz">martin.bainbridge@otago.ac.nz</a> and Hamish Upritchard <a href="https://hanton.org/hantshupritchard@otago.ac.nz">hanish.upritchard@otago.ac.nz</a>
- 3.2. The Geology *Department Laboratory Manager* (DLM) is Ray Marx <a href="mailto:ray.marx@otago.ac.nz">ray.marx@otago.ac.nz</a>
- 3.3. Each HSNO-Exempt laboratory has a designated laboratory supervisor who is responsible for that space. They provide induction procedures and training as required for ALL users of their area. The Laboratory Supervisor maintains a register of appropriately trained people.
- 3.4. The regulation of hazardous substances in the workplace now comes under the Health and Safety at Work Act 2015 (HSWA)
- 3.5. <a href="https://worksafe.govt.nz/topic-and-industry/hazardous-substances/regulations/what-laws-have-changed/">https://worksafe.govt.nz/topic-and-industry/hazardous-substances/regulations/what-laws-have-changed/</a>
  The Environmental Protection Authority (EPA) is still responsible for notifying rules for hazardous substances.

- 3.6. <a href="https://www.epa.govt.nz/industry-areas/hazardous-substances/rules-for-hazardous-substances/epa-notices-for-hazardous-substances/">https://www.epa.govt.nz/industry-areas/hazardous-substances/rules-for-hazardous-substances/</a>
- 3.7. laboratory supervisors are responsible for the recording, use and disposal of chemicals within their laboratory.
- 3.8. All chemicals/hazardous substances must be purchased, used and stored in the approved fashion. Laboratory Supervisors are responsible for ensuring these procedures are followed under the direction of the DLM.
- 3.9. Laboratories are kept secure and not left open after hours. After hours access is restricted to trained and registered graduate students and staff.
- 3.10. Children are not allowed in a HSNO-exempt Laboratory except under close supervision as part of an organised programme, as per University of Otago guidelines.

#### 4. Workshops.

- 4.1 Workshops are areas that do not qualify as HSNO-Exempt laboratories, but contain hazardous equipment or machinery. As such thay are strictly controlled areas, and only trained users are permitted access to these spaces. Examples include the 'rock saw & thin-section suite', 'rock crushing room' and 'paleo-mag' and 'ice deformation' workshops.
- 4.2 Each workshop has a nominated supervisor who is responsible for providing appropriate training and maintaining a register of approved users.
- 4.3 No children are allowed in a workshop except as part of an organised programme and under close supervision, as per University of Otago guidelines

#### 5. Fieldwork.

5.1 The DHSO has the role of field coordinator and liases with external stakeholders / landowners who control access to field sites. Students and researchers rely extensively on the goodwill of such stakeholders for access. In that regard, it is vital that the Department of Geology comply with any external HSWA (2015) framework issues.

- 5.2 External stakeholders may require specific safety equipment for each person. This may include, but is not limited to, safety helmets, high-visibility vests, safety glasses and toe-cap safety boots.
- 5.3 If requested, landowners must be provided with a copy of the University of Otago field risk assessment and public liability certificate.
- 5.4 Students must provide their own high-visibility vest for all field work.
  The Department of Geology will provide other safety equipment as required
- 5.5 Field activities conducted by class groups will be led by an academic staff member, who must submit a 'Field Risk Assessment' form at least two days prior to departure. This will provide a logistical outline that includes a list of participants, transport arrangements, communication plan, accommodation (if necessary) and landowner/permit details relevant to the field trip. It should also include a risk assessment that makes an honest attempt to identify all of the hazards that may be encountered on the excursion accompanied by a mitigation plan.
- 5.6 Department of Geology will provide sufficient staff to ensure safety of the group. A useful ratio is 1 staff member/demonstrator to 10 students. This number may be modified for large 100-level field excursions, or others where hazards are well known and a good mitigation plan is already in place.
- 5.7 Leaders of field activities conducted by individual researchers and students also must submit a 'Field Risk Assessment' form at least three days prior to departure. This provides a logistical outline that includes a list of participants, transport arrangements, communication plan, accomodation (if necessary) and landowner/permit details relevant to the field trip. It also includes a risk assessment that makes an honest attempt to identify all of the hazards that may be encountered on the excursion accompanied by a mitigation plan.
- 5.8 Field transport must be provided by authorised University of Otago vehicles, transport companies, or vehicles hired from a legitimate provider for class excursions. Student or staff fieldwork with private vehicles requires approval (5.12 below)

- 5.9 All drivers of university approved vehicles must have a current Drivers
  Licence and satisfactorily complete a University of Otago approved
  driving assessment.
- 5.10 All drivers must follow safe driving practice and obey road regulations such as speed limits and no consumption of alcohol. Any driving violations are the responsibility of the driver.
- 5.11 The field trip leader must ensure sufficient rest breaks are factored into long journeys in vehicles to reduce driver fatigue.
- 5.12 Students or staff may conduct individual field work in their own vehicles with prior approval of the DHSO and for students, their academic supervisor.
- 5.13 Field work on roadways require implementation of an NZTA approved traffic management plan (hyperlink to requirements page possible?).
- 5.14 First-aid Kits are provided to each staff member and demonstrator on class field trips. A First Aid kit is also available in all University of Otago vehicles.
- 5.15 Department of Geology staff are required to maintain current First Aid Certificates.
- 5.16 A 'Field risk assessment plan' must be completed and left with the DHSO for EACH period of field work. This includes a nominated contact person who can alert emergency services on your behalf if you do not return when expected.
- 5.17 Fieldwork in areas with poor mobile phone coverage will require the use of some other communication device to report in each day.

  Satellite phones, inReach GPS 2-way satellite communicators and a Personal Locator Beacon (PLB) are options that can be made available for field work. Access to these devices is through the DHSO on completion of a Field Risk Assessment and PLB Request form.

  <a href="https://www.otago.ac.nz/geology/admin-health-safety/field-procedures/index.html">https://www.otago.ac.nz/geology/admin-health-safety/field-procedures/index.html</a>
- 5.18 The registered principle contact person for University of Otago
  Personal Locator Beacons (PLB) and inReach, is Campus Watch. Who
  provide an important 24 hour, 7 day a week, contact for emergency
  services.