

# Department Safety and Environmental Policy

## Purpose

To achieve the objective, described in UBC Policy #7, of providing a safe, healthy and secure environment for all members of faculty and staff, students and visitors, by providing specific rules and taking preventative measures. To ensure compliance with environmental legislation.

## POLICY

The Department accepts compliance with the Workers' Compensation Act, Workplace Hazardous Materials Information System (WHMIS), Canadian Environmental Protection Act, BC Waste Management Act, GVRD Sewer Use Bylaw and other applicable legislation as the minimum safety and environmental standard acceptable. All students and members of faculty and staff are encouraged to strive to exceed these minimum legal standards and to eliminate unnecessary risks.

## PROCEDURE SUMMARY

The Department

- C provides a safe working environment by maintaining all equipment and work spaces in safe condition.
- C has established and supports a ***Department Safety and Environmental Committee*** which is mandated **by the university** to carry out the safety programs within the department and make recommendations to ensure that the safety objectives of the University can be achieved.
- C provides minimum first aid: has some staff trained in First Aid Level I and maintains First Aid kits in all labs.
- C requires and offers training in the safe operation of equipment and instruction on procedures to prevent hazards; training and authorization records are kept.
- C supports supervisory staff in the implementation and enforcement of all aspects of the Safety Policy.
- C formulates site specific rules, safe work procedures; and designates (through the Head) *Faculty Area Representatives/Area Supervisors* for all laboratory and shop areas, as indicated in the *Tree of Department Safety Responsibilities* which is updated from time to time.
- C requires research plans that assess safety hazards and lists control measures taken (with a copy on file in main office).
- C requires research plans that assess potential environmental impacts from new projects or activities and detail procedures for disposal, spill clean-up, reporting, etc. (with a copy on file in the main office).

Responsibilities of Faculty Representative/Area Supervisors are outlined in University Policy #7 and include the following:

- C To formulate specific safety rules and safe work procedures for the area of supervision and place documentation in the ***Department Safe Work Procedures Manual*** and make available to all those working in areas under their supervision. Update as required.
- C To ensure that all employees under their supervision are aware of safety practices

and follow safety procedures.

- C To provide training in the safe operation of equipment
- C To inspect regularly their areas for hazardous conditions
- C To correct promptly unsafe work practices or hazardous conditions
- C To be responsive to concerns expressed about personal security and investigate accidents, incidents or personal security concerns which occur in their area of responsibility.
- C To report any accidents or incidents involving personal security or safety to the Head and Safety Committee Chair.

Some of these duties may be delegated or assigned to specific members of staff but the responsibility remains with management.

### **Department Safety and Environmental Committee Membership**

- C In accordance with the University policy, the committee consists of University representatives and Faculty/Staff representatives such that the latter exceeds the number of University representatives.
- C The University representatives, appointed by the Head, are: one faculty member, one representative of the structures laboratory, and one representative of the environmental laboratory (normally the laboratory manager).
- C The Faculty/Staff representatives, elected or appointed by their peers, may include: one member of the Faculty, one member of the office staff, one member of the technical staff and two graduate teaching assistants.
- C The Department has appointed an **Environmental Advisory Committee**, that forms part of the Department Safety and Environment Committee, to monitor and provide advisory assistance to those who generate waste and hazardous wastes in their activities .
- C The local Fire Safety Director attends meetings of the Department Safety Committee as an observer. The Director is appointed by the department head and is responsible for supervising and maintaining the *Department Fire Safety Plan* (required under the B.C. Fire Code); appointing and training Floor Wardens; and conducting fire drills in cooperation with the Fire Department and UBC Plant Operations.
- C Membership on the Department Safety and Environment Committee runs each year from November 1 to October 31. Appointments, nominations and elections occur in November each year, unless a position becomes vacant. Subsequently, organizational charts, phone lists and membership lists will normally be updated.
- C The committee normally meets once a month. At its first meeting each year, the Committee elects a Chair and a Secretary, such that one position is held by a university representative and the other by a Faculty/Staff representative.

### **Role of the Committee**

In order to monitor safety programs each safety committee should:

- C Participate in regular worksite inspections and report any hazardous conditions found
- C Review written safety instructions and make recommendations for their improvement, particularly when new equipment or processes are introduced.
- C Review and make recommendations concerning all reported accidents or incidents which may have occurred in their area of coverage;
- C Ensure that accidents have been reported to the University Health, Safety and Environment office;

- C Staff representatives should accompany WCB officers on inspection tours as required by WCB Regulations;
- C Review and make recommendations concerning, inspection reports from WCB;
- C Consider recommendations or suggestions from staff and students concerning health and safety issues and endorse them where warranted;
- C Co-ordinate committee activities with the local Fire Safety Director and cooperate with him or her to promote fire safety;
- C Include in all its activities consideration of conditions or circumstances which may affect the personal security of students, faculty or staff.
- C Conduct audits of the health, safety and personal security programs in their area of responsibility.

### **Detailed Department Procedures**

The Department and the Safety and Environment Committee work to accomplish the objective of providing a safe, healthy, secure and protected environment by outlining the following procedures. It is the responsibility of individual students, members of faculty and staff to become informed and follow them:

- C Faculty and staff and graduate students receive the **Department Employee Orientation Manual** at the start of their employment and when revisions are made. Graduate students and some undergraduates may also receive the **Abbreviated Safety and Environment Manual** as part of their orientation package. Undergraduates receive an abbreviated manual at the start of their first laboratory course. Supervisors are responsible for assessing training needs and arranging training.
- C Hazard assessment (checklist in Orientation Manual and Abbreviated Manual) shall be conducted before any potentially hazardous activity is initiated. Training requirements indicated by such an assessment shall be arranged and achieved before such work begins.
- C A Safety Plan must be prepared for all research activities which address issues identified in the hazard assessment. Control measures shall be in place before work begins.
- C An Environmental Protection Plan must be prepared for all waste generators listing wastes produced and methods of disposal. Inventories and records must be on file. Where possible reduce, reuse and recycle.
- C The **Department Safe-Work Procedures Manual** is available and provides procedural information about all research activities within the department. It or parts of it can be requested to assist in development of Safety and Environmental plans.
- C Anyone purchasing and using a **Workplace Hazardous Materials Information System**-regulated product (compressed gases and most chemicals) must inform the Department WHMIS Coordinator and read the associated **Material Safety Data Sheet** before proceeding. WHMIS training and advise is available upon request from the Department WHMIS Coordinator. Disposal of such products is also likely to be regulated and must be compliant.
- C Research set-ups shall have a "Research in Progress" sign affixed detailing contact information and shut-down procedures where applicable.
- C Students/staff/faculty shall observe rules and procedures and be safety-conscious in all activities.
- C Fire alarms must be treated as real emergencies and building evacuation must occur.
- C Students/staff/faculty shall report as soon as possible any accident, injury, or unsafe

condition, activity or equipment to a supervisor. Accident reports must be filled in and submitted to H.S.& E. and the department committee.

- C Those working in specific areas must comply with rules listed for that area (i.e. use appropriate personal protective equipment when required, including: head, eye, ear, face, hand, foot, respiratory protection. ) See Site Specific rules.
- C Students working in some laboratories may be required to purchase safety shoes and a laboratory coat. Hardhat, safety glasses, gloves, dust masks, etc. will be made available (on loan) when required on a day by day basis, however hard hats and safety glasses are also available for purchase at the main office.
- C Certain designated shop and laboratory equipment i.e. forklift, cranes, saws, can only be operated by those trained and authorized to do so. Training must be arranged with supervisory staff who will provide authorization at their discretion. In some cases training must be certified or be according to CSA standard of training. Training lists are kept.
- C Graduate and undergraduate summer students (except Environmental option, see below) who intend to work in laboratories must attend the Department's annual safety course or make alternate arrangements to receive appropriate safety instruction. All Environmental Engineering graduate or summer students intending to use the Environmental Engineering laboratory must take the Chemical Safety Course or the Introduction to Laboratory Safety for graduate or summer students before starting (UBC's Dept. of Health, Safety & Environment conducts these courses and offers them several times during the year.)
- C Those engaged in extra-curricular activities, such as Civil Engineering Club projects, must comply with this policy.

### **Site Specific Rules**

Users of the following locations must comply with the *Site Specific Safety Rules* pertaining to each location (posted at the lab entrance and available in the Department Safe-Work Procedures Manual). The rules are developed and modified from time to time by the designated faculty and technical supervisors for the corresponding location and with the approval of the Head. Use of certain labs and equipment may be subject to scheduling and require work/authorization forms to be completed.

Earthquake Lab	Room 1005	Hydraulics Lab	RH 138-139
Environmental Engineering	Room 1301	Materials Lab	Room 1012
Geotechnical Engineering	Room 1010	Structures Lab	RH 100
Geotechnical Graduate Lab	RH 130	Workshops	RH 140-146

In addition, use of certain equipment within these locations must follow training and authorization requirements. Supervisors will make arrangements.