

**University of Toronto
Department of Civil Engineering
Geomechanics Testing Laboratories**

POLICY ON PERSONAL PROTECTIVE EQUIPMENT AND SPACE MANAGEMENT

1. GENERAL

This policy is intended to facilitate implementation of the governing policies of the University of Toronto (U of T Health and Safety Policy, and standards governing protective footwear, headwear, eye and facewear, and hearing protection), applicable CSA standards, and the Ontario Health and Safety Act and its associated Regulations (in particular the regulations on Industrial Establishments and Construction Projects). Copies of the relevant standards can be found in the Geomechanics Laboratory Safety Manual, located in GB313. This policy also governs the broader issue of the laboratory's space management, including: scheduling of testing programs, designating safe working areas for these testing programs, designating safe and efficient storage for materials and equipment specific to these testing programs, and assessing health and safety implications of these programs.

2. APPLICATION

The spaces covered by this policy include:

- a) The main "dry" research laboratories, GB308A, and GB313 and its contained offices A, B, C and F.
- b) The "wet" research laboratory GB308B.
- c) The third floor teaching laboratory GB308.
- d) The basement teaching laboratory GB13.

This policy applies to everyone entering the identified spaces, including staff, students, and faculty and their guests.

3. POLICY

- a) Regular Policy Review: The Laboratory Manager and the Academic Coordinator of the Geomechanics Testing Laboratory shall review this Policy annually during the first week of April, with a written report on this review filed with the Department's Joint Health & Safety Committee and copied in the Geomechanics Laboratory Safety Manual.
- b) Training: The Laboratory Manager shall train all users of the Geomechanics Testing Laboratory in general aspects of Health & Safety, including the scope and application of this policy. Every user must pass a written test that assesses the user's general H&S understanding. The Laboratory Manager will keep the written test on file, and the user's name and date of training will be entered into a log in the Geomechanics Laboratory Safety

Manual. Task-specific training will be provided by the Laboratory Manager for each user on an as-needed basis, and a written description of such task-specific training shall be logged in the Geomechanics Laboratory Safety Manual.

c) Foot Protection:

- i. Teaching Laboratories: During teaching laboratories in GB308 and GB13, all occupants of these spaces shall wear CSA approved protective footwear (“green patch” shoes or boots). Signs to this effect shall be posted at the entrances to the teaching labs.
- ii. Research Laboratories: All users working in the research areas (but excluding office areas) shall wear CSA approved protective footwear. Signs to this effect shall be posted at the entrances to the research labs.
- iii. Visitors to the Research Laboratories: This sub-section is intended to facilitate short-term visits (i.e., of a few minutes duration) to the research laboratories. All standard test procedures (including, but not limited to, triaxial, consolidation, and direct shear test setups), as well as all special-purpose test setups (see sub-section f, below) shall be subject to a hazards assessment process (including the potential for foot hazards), the results of which shall be filed in the Geomechanics Laboratory Safety Manual. Standard equipment and specialized setups requiring the Visitor to wear CSA approved protective footwear shall be labeled, or the area of the equipment’s use or storage shall be labeled. Visitors to the research laboratories shall wear CSA approved protective footwear when in proximity (as defined by the hazards assessment process) to specified tasks. Signs to this effect shall be posted at the entrances to the research labs.

- d) Eye & Face Protection: During teaching laboratories in GB308 and GB13, all occupants of these spaces shall wear CSA approved protective eyewear for specific labs identified through a hazards assessment process. The student manuals for the identified labs shall note the required safety equipment, and the Teaching Assistants for these labs shall be required to announce the need for the protective eyewear at the start of the labs and will have the authority to evict any students not wearing the required protective equipment. In the research areas, such protective eyewear will be required only for specified tasks identified through a hazards assessment process, the results of which shall be filed in the Geomechanics Laboratory Safety Manual. All users of the research laboratories shall be trained to recognize situations requiring protective eyewear, and shall be made aware of the specific tasks identified through the hazards assessment process. Standard equipment requiring the user to wear protective eyewear shall be labeled, or the area of the equipment’s use or storage shall be labeled, to indicate the requirement for protective eyewear during the equipment’s use.

- e) Other Personal Protective Equipment: Use of additional personal protective equipment in specified areas or for specific tasks shall be documented in the Geomechanics Laboratory Safety Manual and signs shall be posted in the appropriate areas. This equipment includes, but is not limited to, hearing protection, protective headwear, Tyvec suits for protection from contact with epoxy, gloves to protect hands, and respirators while using designated substances.

- f) Project Planning: All research projects planned to take place in the Geomechanics Laboratories shall be discussed in advance with the Geomechanics Laboratories Users Group and with the Laboratory Manager. Every project shall be subject to a hazards assessment process, the results of which shall be kept in the Geomechanics Laboratory Safety Manual. All designated substances shall require their MSDS information and this shall be copied in the Geomechanics Laboratory Safety Manual. The Laboratory Manager, the Academic

Coordinator, and the Principal Investigator shall work together to ensure that space is appropriately allocated for the safe execution of the planned experiment, as well as for the safe storage of all equipment and materials specific to the experiment before, during, and after completion of the experiment.

4. ENFORCEMENT

Any user who does not comply with this policy shall be reported to the Laboratory Manager. Anyone found in the designated areas without the proper safety equipment will be removed from the laboratory and will have their laboratory privileges suspended. Where laboratory privileges have been suspended, a meeting shall be convened between the user, the user's supervisor, the Laboratory Manager and the Academic Coordinator. At the meeting, the safety problems will be identified and an appropriate course of action will be determined so as to ensure that the laboratory user works safely. In extreme cases, where a laboratory user fails to comply with the directions of the Laboratory Manager and Academic Coordinator, the matter will be referred to the Department Chair.