1.0 **GENERAL**

1.1 **HAZARDOUS BUILDING MATERIALS (ASBESTOS, DUST, LEAD, SILICA, MOULD)**

.1 All activities concerning hazardous building materials handling, removal, and disposal shall conform to WorkSafeBC Occupational Health and Safety Regulations (OH&S) and related guidance documents (current edition) and to any additional requirements indicated by SFU EHRS.

.2 SFU EHRS has an inventory of all hazardous materials in buildings; any hazardous materials work should be coordinated with SFU EHRS.

.3 A detailed hazardous materials report, written by a qualified person, must be provided as part of the Contract Documents. The report must be available on site and reviewed by the worker prior to commencing work.

.4 The Contractor shall review the Contract Documents and site and promptly report to the Owner’s representative any errors, inconsistencies or omissions she/he may discover, concerning the presence of asbestos-containing materials. If suspect hazardous material is discovered during the normal progress of the project, the Contractor shall not proceed with the affected portion of the Work until direction from the Owner’s Representative has been received. The presence of asbestos-containing material must be reported to the Project Manager and the SFU EHRS.

.5 Should there be hazardous building materials present on the site, either specifically stated in the Contract Documents or discovered during the project, all work with these materials must be performed by a qualified Hazardous Materials Abatement Contractor. The scheduling of the work is the responsibility of the Contractor. All applicable regulatory requirements such as WorkSafeBC and SFU regulations and guidelines as provided by SFU EHRS must be strictly adhered to.

.6 All air monitoring and inspections will be conducted by a qualified OH&S Consultant who must be independent from the Owner’s Retained Consultant engaged on the project.

.7 At least 48 hours prior to commencing work, the Abatement Contractor will file a “Notice of Project” (NOP) and Site-Specific Work Procedures intended for use on the project to WorkSafeBC. A copy of the NOP, risk assessment and procedures must also be emailed to the SFU EHRS and the Project Manager.

.8 Only approved asbestos abatement contractors and hazardous material consultants (independent from the Owner’s Retained Consultant engaged on the project) can be used. Confirm company viability with SFU Facilities and SFU EHRS.

1.2 **POLYCHLORINATED BIPHENYLS (PCB)**

.1 The procedure for the removal and disposal of PCB containing light fixtures shall be carried out in accordance with requirements in Division 16.

.2 All activities involving handling, storage and transportation of PCB containing materials must be carried out in accordance with all Provincial and Federal regulations and documents:
1.3. RADIOISOTOPES

.1 New construction or major renovation of facilities designated for radioisotope use shall be reviewed and approved in writing by SFU EHRS.

.2 Radioisotope laboratories shall be designed and constructed in accordance with the Canadian Nuclear Safety Commission document GD-52 - Design Guide for Nuclear Substance Laboratories and Nuclear Medicine Rooms. Note that all new intermediate lab designs must be approved in advance of construction by the CNSC. This approval process may take up to four months.

.3 In the case of renovations in laboratories designated for radioisotope use, the Consultant will contact SFU EHRS at least 10 working days prior to project start up, to arrange for the safe removal of radiation hazards by the occupants. Radiation warning signs will be removed only by the RSO.

.4 Prior to commencement of renovation construction, a complete set of contamination control records (wipe tests) will be generated by the principal investigator responsible for the space. These records must be submitted to the RSO for approval.

.5 The Contractor must obtain written assurance from the RSO prior to commencement of construction that the area is free of radioactive contamination.

1.4. WORKPLACE HAZARDOUS MATERIAL INFORMATION SYSTEM (WHMIS 2015)

.1 The Contractor, Subcontractors and Suppliers shall comply with Workers Compensation Boards' Workplace Hazardous Materials Information System (WHMIS 2015). Regulations pertaining to labeling, provision of Safety Data Sheets (SDS), education and training programs, safe handling and emergency procedures for "Controlled Products" being used in the Project. This includes handling hazardous materials so that project workers, the public, the SFU community and property, and the environment are not at risk.

.2 Operations producing odours such as the application of adhesives and painting shall be carried out in a safe manner and in a manner to prevent the spread of fumes to occupied areas of the building or to adjacent buildings. The consultant must submit Safety Data Sheets for all chemical treatments, adhesives and potentially harmful products to be used to the Project Manager.

1.5. BIOSAFETY AND OTHER HAZARDS

.1 The Project Manager will notify the occupants and EHRS at least 10 working days before project startup to arrange for the safe removal and/or disposal from within and adjacent to the project area of all hazardous materials including but not limited to chemicals, radioactive materials, biohazardous materials and glass laboratory equipment. Signs warning of the presence of hazardous materials may also be removed as required at the discretion of EHRS. Other laboratory equipment, which cannot be moved and which presents a potential for injury will be locked out and sealed. EHRS will provide written confirmation to the Contractor and Consultant that the project area is ready for construction.
1.6. SPILLS & CLEANUP

.1 The Contractor, subcontractors and suppliers must comply with the B.C. Ministry of the Environment Regulations involving the required response to spills of hazardous materials that could result in contamination of the environment (air, water, ground).

.2 The Contractor, subcontractors and suppliers must be able to respond to spills of a hazardous or unknown material while working at SFU. Procedures would include isolating the area to prevent further exposure to the material and immediately informing the on-site superintendent and the SFU Project Manager, SFU EHRS and/or the Burnaby Fire Department.

.3 The Contractor, subcontractors and suppliers must have available the material, procedures and trained personnel required to clean up spills of any material they use in their work at SFU.

1.7. STORAGE AND HANDLING

.1 Coordinate storage of hazardous materials with the Project Manager and abide by internal requirements for labeling and storage of materials and wastes.

.2 Store and handle hazardous materials and wastes in accordance with applicable federal and provincial laws, regulations, codes, and guidelines.

.3 Store and handle flammable and combustible materials in accordance with current British Columbia Fire Code of Canada requirements.

.4 Keep no more than 45 litres of flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use. Store all flammable and combustible liquids in approved safety cans bearing the Underwriter's Laboratory of Canada or Factory Mutual seal of approval. Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires the written approval of the Consultant.

.5 Transfer of flammable and combustible liquids is prohibited within buildings.

.6 Transfer of flammable and combustible liquids will not be carried out in the vicinity of open flames or any type of heat-producing devices.

.7 Flammable liquids having a flash point below 38°C, such as naptha or gasoline, will not be used as solvents or cleaning agents.

.8 Store flammable (flash point < 37.8°C) and combustible (flash point < 37.8°C) waste liquids for disposal in approved containers located in a safe, ventilated area. Keep quantities to a minimum.

.9 Observe smoking regulations at all times. Smoking is prohibited in any area where hazardous, flammable, and/or combustible materials are stored, used, or handled.

.10 Abide by the following storage requirements for hazardous materials and wastes:
.1 Store hazardous materials and wastes in closed and sealed containers which are in good condition.

.2 Label containers of hazardous materials and wastes in accordance with WHMIS 2015.

.3 Store hazardous materials and wastes in containers compatible with that material or waste.

.4 Segregate incompatible materials and wastes.

.5 Ensure that different hazardous materials or hazardous wastes are not mixed.

.6 Store hazardous materials and wastes in a secure storage area with controlled access.

.7 Maintain a clear egress from storage area.

.8 Store hazardous materials and wastes in a manner and location which will prevent them from spilling into the environment.

.9 Have appropriate emergency spill response equipment available near the storage area, including personal protective equipment.

.10 Maintain an inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.

.11 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS 2015) requirements.

.12 Report spills or accidents immediately to SFU Project Manager, Campus Security and EHRS. Submit a written spill report to Project Manager and EHRS within 24 hours of incident.

1.8. TRANSPORTATION

.1 Transport hazardous materials and wastes in accordance with federal Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.
2.0 **PRODUCTS**

2.1. **MATERIALS**

.1 Only bring on site the quantity of hazardous materials required to perform work.

.2 Maintain SDSs in proximity to where the materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

3.0 **EXECUTION**

3.1. **DISPOSAL**

.1 Dispose of hazardous waste materials in accordance with applicable federal and provincial acts, regulations, and guidelines.

.2 Recycle hazardous wastes for which there is an approved, cost effective recycling process available.

.3 Send hazardous wastes only to authorized hazardous waste disposal or treatment facilities.

.4 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.

.5 Disposal of hazardous materials in waterways, storm or sanitary sewers, or in municipal solid waste landfills is prohibited.

.6 Dispose of hazardous wastes in a timely fashion in accordance with applicable provincial regulations.

.7 Dispose of aerosol cans in accordance with applicable regulations.

.8 Dispose of gas (propane/butane/other) cylinders in accordance with applicable regulations.

***END OF SECTION***