

PROJECT MANUAL (SPECIFICATIONS)

SHSC C2 Decant (K3E) and GIM Decant (K2E)
2075 Bayview Ave
North York, ON

2025-11-20

Issued For: Tender

Volume 3 – Reports

NORR
175 Bloor St E 15th Floor,
Toronto, ON M4W 3R8

Project No.: HS1024-0383

PART 1 PROJECT TEAM

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1.5 ELECTRICAL CONSULTANT

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END OF SECTION

The following professional seals and signatures are provided as required by the Building Code for the above Project and apply to documents prepared under the supervision of the following registered professionals as identified on the Project Manual table of contents.

ARCHITECTURAL (A)	STRUCTURAL (S)
ELECTRICAL (E)	MECHANICAL (M)

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DESIGN DISCIPLINE AND ISSUING AUTHORITY (IA)

DOCUMENTS HAVE BEEN PREPARED AND ISSUED BY EACH ISSUING AUTHORITY AS FOLLOWS:

ARCHITECT (A), PROFESSIONAL ENGINEER – STRUCTURAL (S), PROFESSIONAL ENGINEER – MECHANICAL (M), PROFESSIONAL ENGINEER – ELECTRICAL (E), DATA AND COMMUNICATIONS CONSULTANT (IT), VERTICAL TRANSPORTATION (VT), LANDSCAPE ARCHITECT (L), HARDWARE (H).

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1.1 STATUS OF AVAILABLE PROJECT INFORMATION

- 1.1.1 Available Project Information (or Available Information) means the specific documents, reports, drawings, data, or policies expressly identified in this Section.
- 1.1.2 Available Project Information listed herein does not form part of the Contract Documents unless:
 - 1.1.2.1 It is copied, transcribed, or otherwise explicitly incorporated into the Drawings or Specifications forming the Contract Documents; or
 - 1.1.2.2 It is expressly listed as a Contract Document in the Agreement between Owner and Contractor.
- 1.1.3 This information is made available primarily to assist Bidders in preparing their bids and to fulfill the Owner's duty of disclosure.

1.2 USE AND RELIANCE UPON AVAILABLE PROJECT INFORMATION

- 1.2.1 Bidders shall examine, interpret, and draw their own conclusions from the Available Project Information. Bidders must consider the date the information was created and any limitations stated within the information itself. The Owner and Consultant assume no responsibility for the Bidder's interpretations or conclusions.
- 1.2.2 Available Project Information, or any part thereof, shall not be construed as defining the scope or requirements of the Work unless also reflected in the Drawings and Specifications. In case of conflict or discrepancy between Available Project Information and the Drawings or Specifications, the Drawings and Specifications shall govern.
- 1.2.3 Bidders, acting reasonably, may rely on the accuracy and completeness of the Available Project Information listed below when preparing their bids, subject to any qualifications stated within the information itself, unless the "Reliance Status" for a specific item below expressly states otherwise.
- 1.2.4 Unless noted otherwise for a specific item, the following Available Project Information is included electronically with the Bid Documents. Bidders are responsible for obtaining and reviewing all listed information.

1.3 OWNER POLICIES AND STANDARDS

- 1.3.1 Title: "Sunnybrook Health Sciences Centre Health and Safety Rules"
 - 1.3.1.1 Issuer: Sunnybrook Health Sciences Centre
 - 1.3.1.2 Number of Pages: 59

1.4 HAZARDOUS MATERIALS / DESIGNATED SUBSTANCES REPORTS

- 1.4.1 Title: "Revised Limited Designated Substance Survey Report (K2E & K3E Renovations)"
 - 1.4.1.1 Prepared By: Maple Environmental Inc.
 - 1.4.1.2 Date: 16 July 2025
 - 1.4.1.3 Number of Pages: 30

1.5 LEAD SHIELDING REPORT

1.5.1 Title: "Room Shielding Calculations"

1.5.1.1 Prepared By: Sunnybrook Health Sciences Centre.

1.5.1.2 Number of Pages: 02

END OF SECTION

OWNER'S RULES AND REGULATIONS

SUNNYBROOK HEALTH SCIENCES CENTRE HEALTH AND SAFETY RULES

(to be posted at job site)

1. Smoke tobacco in designated areas only. Never smoke in any location that contains a combustible or explosive condition or atmosphere.
2. No person who is impaired by alcohol or drugs shall enter and/or remain on the grounds.
3. Follow instructions; don't take chances. If you don't know, ask.
4. Immediately report to your supervisor any condition or practice you think might cause injury to employees or damage to equipment.
5. Put everything you use in its proper place. Disorder causes injury and wastes time, energy, and material. Keep your work area clean and orderly.
6. Any personnel operating equipment is to be duly authorized and instructed (licensed where practical) in the safe method of operation.
7. Whenever you, or the equipment you operate is involved in an accident, regardless of how minor, report it to your supervisor immediately. Get first aid promptly.
8. Repairs are to be made by authorized, licensed personnel only. Need for repairs must be reported to your immediate supervisor, and are not to be undertaken by non-qualified personnel.
9. Wear approved personal protective equipment as directed. Keep it in good condition.
10. All authorized visitors on the property are required to wear and use appropriate safety equipment.
11. Don't horseplay; avoid distracting others.
12. When lifting, bend your knees, grasp the load firmly, then raise the load, keeping your back as straight as possible. Get help for heavy loads.
13. Obey all rules, signs, and instructions.
14. In the event of an accident, the Occupational Health and Safety Clinic is located in H Wing, Ground Floor, room HG46.

SUNNYBROOK HEALTH SCIENCES CENTRE HEALTH AND SAFETY RULES
(to be posted on site)

15. A full report of any accident is to be submitted in writing to the Consultant's representative, within 24 hours of the occurrence.
16. The *Contractor* shall provide to the *Owner's* Safety Coordinator, the name and phone number of their health and safety delegate.
17. Before work begins, the *Contractor* shall deliver to the Sunnybrook Occupational Health and Safety Department - Safety Coordinator, a list of the chemical substances to be used in all work, and a Material Safety Data Sheet for each chemical substance (this is a WHMIS requirement).
18. The *Contractor* shall also provide a list of physical or biological agents produced by its work.
19. The *Contractor*, before the work commences, shall arrange a meeting where the *Contractor* and its workers are informed of the following:
 1. the requirement to comply with the general health and safety rules required by Sunnybrook;
 2. the requirement to comply with the *OHSA*;
 3. the name and telephone number (both home and office) of the *Contractor's* supervisor; and the health and safety representative, or members of the Subcontractors committee at the job site, whichever is applicable;
 4. the areas of the location to which the *Contractor* and the *Contractor's* workers are allowed access;
 5. any special hazards at the job site of which the *Contractor* and/or its workers normally would be expected to be aware (for example, what to do in case of a fire);
 6. the requirements imposed upon the *Contractor* in the event that one of the *Contractor* workers is injured at work.
20. As the work progresses, planned inspections are to be made of areas/places where the *Contractor* and his workers are working to ensure the following:
 1. the *Contractor* and his workers comply with health and safety laws;
 2. the and his workers comply with the *Owner's* general health and safety rules;
 3. the *Contractor's* work is not creating an unacceptable health and/or safety hazard for the *Owner's* employees.
21. Comply with the attached Contractor Safety Requirements document.

WHMIS

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM REQUIREMENTS

1. Comply with Workplace Hazardous Materials Information System in accordance with the Occupational Health and Safety Act (*OHS*A) requirements.
2. Before commencement of Work and during full term of the Contract, provide a list with current Materials Safety Data Sheets (MSDS) of all hazardous materials proposed for use on Project. List and data sheets shall be delivered to Sunnybrook Occupational Health and Safety Department - Safety Co-ordinator.
3. Label hazardous materials used and/or supplied on the Project in accordance with WHMIS requirements.
4. Provide detailed procedures for safe handling storage and use of hazardous materials. List special precautions and safe cleanup and disposal procedures. Conform to Environmental Protection Act for disposal and cleanup requirements.
5. Obtain from the Owner, where applicable, a list and MSDS of hazardous materials that may be handled, stored or used by Owner's employees and/or Other Contractors retained by Owner at location where work of this Contract will be performed.
6. Ensure that those who handle, and/or are exposed to, or are likely to handle or to be exposed to hazardous materials, are fully instructed and trained in accordance with WHMIS requirements.

SUNNYBROOK HEALTH SCIENCES CENTRE

CONTRACTOR'S ACKNOWLEDGEMENT

Sunnybrook Health Sciences Centre ("Sunnybrook") has included in the Tendering information for this contract a copy of the list of any designated substances present at the Project or Work site. The Notice of Designated Substances included in the Tendering Information is attached to this Acknowledgement.

If awarded this contract, the Contractor, as *Contractor* within the meaning of the OHSA, undertakes:

- to inform other contractors and all subcontractors retained to perform services on the Project or the Work of the existence of the designated substances, if any, which are present at the Project, and to provide to other contractors and all subcontractors a copy of the list of designated substances which is attached to this Acknowledgement, prior to entering into any contracts with those other contractors or subcontractors for the supply of services;
- to notify Sunnybrook of the presence of any potentially hazardous materials or toxic substances which will be brought to the Project or the Work by the Contractor, or Contractor's employees and to provide all applicable MSDS sheets, if any, to Sunnybrook;
- to ensure that other contractors and all subcontractors retained to supply services for the Project or the work notify Sunnybrook of the presence of any potentially hazardous materials or toxic substances they bring to the Project or the Work and ensure that they provide all applicable MSDS sheets, if any, to the Contractor, other contractors and all subcontractors to so comply.

Contractor:

Contract to be performed:

The Contractor acknowledges that he has received the List of Designated Substances attached to the Tendering Information, and agrees to be bound by the undertakings set out above.

Date

Contractor's Signature

Note: This Acknowledgement is an integral element of the Tender Documents. This Acknowledgement must be signed and returned with the Tender Bid documents.

SUNNYBROOK HEALTH SCIENCES CENTRE

NOTICE OF DESIGNATED SUBSTANCES

The following Designated Substances are present at Sunnybrook Health Sciences Center:

<u>Designated Substance</u>	<u>Location</u>
Asbestos on Construction Projects and in Buildings and Repair Operations	Can be expected in varying states in all wings except L, M, S, and T
Ethylene Oxide	Regional Processing Centre; Receiving – M-Wing Basement; only present during a spill
Isocyanates	SCIL – possible in other areas in small quantities
Mercury	Used in older instruments – only present during a spill
Benzene	Principally found in laboratories but may be found elsewhere
Lead	Used in many locations as lead shielding, or in lead paint.
Arsenic	Possible in laboratories

SUNNYBROOK HEALTH SCIENCES CENTRE
NOTICE OF BIOLOGICAL, CHEMICAL AND PHYSICAL HAZARDS

Biological:

Sunnybrook Health Sciences Centre (Sunnybrook) is a fully functioning hospital and medical research facility. As such any biological hazard that could infect a person outside the facility can be expected within the facility. This includes any communicable or non-communicable disease.

Physical Hazards:

Sunnybrook also contains physical hazards common to all public buildings. Contractors, their employees, and subcontractors must be aware of the general hazards associated with any kind of work in a full service public facility with residential living.

In addition to "normal" physical hazards there are also specific departmental hazards. Contractors must make their employees and subcontractors aware of the hazards they may encounter and the safety precautions to take. Contractors are required to contact SHSC departmental managers, and/or the safety office, and/or the Corporate Planning and Development or maintenance project manager regarding any specific hazards.

Chemical Hazards:

In addition to the designated substances mentioned under The Notice of Designated Substances there are approximately 5000 WHMIS regulated chemicals at Sunnybrook and several thousand chemicals covered by The Food and Drug Act, The Pest Control Act, The Atomic Energy Control Act, and the Explosives Act. All contractors are required to have their workers WHMIS trained to work on the premises. Contractors are required to contact SHSC departmental managers, and/or the safety office, and/or the Corporate Planning and Development or maintenance project manager regarding any specific hazards.

SUNNYBROOK HEALTH SCIENCES CENTRE SAFETY RULES APPLICABLE TO OUTSIDE
CONTRACTORS AND THEIR EMPLOYEES ENGAGED TO WORK AT SUNNYBROOK

(A) ALL CONTRACTOR'S PERSONNEL

1. Work in compliance with the provisions of the Occupational Health and Safety Act and the regulations, and in compliance with the employer's health and safety rules;
2. Use or wear any equipment, protective devices or clothing required by the Owner or by the employer;
3. Report missing or defective equipment or protective devices to the employer;
4. Report any known workplace hazard to the employer;
5. Report violations of safety legislation or safety rules to the employer;
6. Do not remove or make ineffective any protective device required by legislation, by SHSC or by the employer;
7. Do not use or operate any equipment or work in a way that might endanger oneself, or any other person;
8. Do not engage in any prank, contest, feat of strength, unnecessary running or rough or boisterous conduct.

(B) SUPERVISORY PERSONNEL (Person(s) having charge of the workplace or authority over the Contractor's employees)

1. Ensure that supervised employees work in compliance with the Occupational Health and Safety Act and regulations, these rules and the employer's health and safety rules;
2. Ensure that safety equipment, protective devices or clothing is used or worn by employees and visitors to the work site;
3. Advise employees and visitors to the work site of any potential or actual health or safety dangers known to exist;
4. Ensure appropriate training is given to employees about measures and procedures to be taken for their protection including, as required, (but not necessarily limited to): asbestos awareness training and WHMIS training);
5. Take every precaution reasonable in the circumstances for the protection of employees and any other persons at the work site.

* * *

END OF SECTION



Contractor Safety Requirements

Sunnybrook Health Sciences Centre		Policy No:	HR-0090
Title	Contractor Safety Requirements	Original: (mm/dd/yyyy)	11/01/2007
Category	Human Resources	Reviewed: (mm/dd/yyyy)	03/10/2022
Sub-Category	OccHealth & Safety	Revised: (mm/dd/yyyy)	03/27/2017
Issued By:	Occupational Health & Safety		
Approved By:	Senior Leadership		

The Sunnybrook Intranet document is considered the most current.
Please ensure that you have reviewed all linked documents and other referenced materials within this page.

POLICY STATEMENT:

It is a Sunnybrook Health Sciences Centre (Sunnybrook) policy to ensure that the contractor shall also comply with all federal, provincial and municipal governmental laws and regulations which are applicable to its business, and in particular, those affecting health and safety, workers' compensation and environmental matters.

This policy applies to all contracted work including capital projects, renovation and service contracts. Sunnybrook or its agent or delegate is the owner of all projects and will select a constructor for all projects.

DEFINITION(S):

Constructor: a person who undertakes a project for an owner and includes an owner who undertakes all or part of a project by himself or by more than one employer. Occupational Health & Safety Act, s.1.

Contractor: refers collectively to constructors, employers, sub-contractors, service companies hired by the owner to perform project or service work.

Designated Substances: A biological, chemical or physical agent or a combination thereof prescribed as a designated substance (by the Act) to which the exposure of a worker is prohibited, regulated, restricted, limited or controlled e.g. asbestos, mercury, lead. Occupational Health & Safety Act, s.1.

Employer: a person who employs one or more workers or contracts for the services of one or more workers, and includes a contractor or subcontractor who performs work, supplies services, or undertakes with the owner, constructor or another contractor or subcontractor to perform work or supply services. Occupational Health & Safety Act, s.1.

Owner: includes a trustee, receiver, mortgagee in possession, tenant, lessee, or occupier of any lands or premises used or to be used as a workplace, and a person who acts for or on behalf of an owner as an agent or delegate. Occupational Health & Safety Act, s.1.

Project: means a construction, renovation or maintenance project.

Project Manager: and individual or firm designated by Sunnybrook to manage a project. It includes a manager who hires a contractor for service work.

RELATED POLICIES:

[Capital Project Management policy](#) (FIN-087)

[Infection Control during Construction, Renovation and Maintenance](#) (IPAC-0006)

[Mould Management](#) (IPAC-0015)

[Asbestos Management](#) (HR-0089)

[Restricted & Confined Space](#) (HR-109)

POLICY:**1.0 Responsibilities****Owner**

- Appoint a project manager.

Constructor**The constructor shall ensure the following for projects they undertake:**

- The measures and procedures prescribed by the Occupational Health & Safety Act (OHSA) and regulations are carried out.
- Every employer and worker performing work on the project complies with the OHSA and regulations.
- The health and safety of workers on the project is protected.
- Provide proof of WSIB coverage for all workers.
- Comply with Sunnybrook's sign in procedure.
- Ensure that all required communication is provided to all workers so they are also aware of Sunnybrook's policies and procedures.
- Ensure workers familiarise themselves with emergency equipment (i.e. fire extinguishers, pull stations, etc.) located in the immediate work area to facilitate a quick response in the event of an emergency. Monthly alarm tests are performed that require everyone to comply with evacuation procedures outlined for individual areas.
- The contractor shall abide by and shall ensure that each of the contractor's employees and sub-contractor's employees (if applicable) abide by Sunnybrook's health and safety policies and procedures. The contractor will also be able and willing at such times as recommended by Sunnybrook to provide additional precautions as deemed necessary by Sunnybrook for safeguarding employees and equipment. The contractor further acknowledges and agrees that any violation of safety policies and procedures is justification for the immediate termination of its Contract with Sunnybrook, without any further obligation on the part of the Sunnybrook.

Visitor (delivery personnel, inspectors, vendors etc. with an ongoing and/or established professional relationship with Sunnybrook)

- Must contact appropriate Sunnybrook personnel on arrival and be informed of and adhere to applicable Sunnybrook health and safety policies and procedures related to their visit.

Employer (constructor, contractor or sub-contractor)

- Employers are responsible for complying with all employer duties under the OHSA and regulations.
- Ensure workers are qualified for the work performed.

Project Manager (The person responsible for hiring the contractor and who the contractor will sign in with upon arrival at Sunnybrook)

- Is responsible for ensuring completion of the [Contractor Policy Sign-Off Form](#).

- Provide contractor with relevant hospital policies and information including designated substance surveys, confined or restricted spaces, as well as information on any other hazard inherent to the work area.
- Act as the contractor's contact person for the duration of the contract.
- Notify contractor that performance will be monitored and failure to follow legislative requirement or hospital policies may result in a "stop work" order or removal from the workplace.
- Notify occupant of project work.
- Involve Infection Prevention & Control (IP&C), Occupational Health and Safety (OHS), Fire Prevention and Security, Environmental Services, and Plant Operations and Maintenance as required to ensure hospital policies and procedures are followed.
- Ensure contractor(s) are properly identified by a Sunnybrook ID badge at all times
- Advise Sunnybrook Managers/Supervisors if work is being done in their area with the expected time frame and impact on the department.

2.0 **Planning & Contractor Selection Phase**

- a. All project work or work performed by an external contractor must have an assigned project manager.
- b. As part of the bidding process, contractors must provide health and safety documentation as well as previous accident/incident experience.
- c. The Project Manager must consider health, safety and environmental criteria as part of the pre-qualification or tendering process to select a contractor for a project. Certifications, training records, previous hospital experience, health and safety performance, WSIB CAD-7 Rating, and company policies should be reviewed and considered in the selection process.
- d. During the tendering process, the Project Manager must provide the contractors with a list of any designated substances in the work area, including the location and condition of any asbestos as well as the location of any other designated substances. For asbestos, the OHS department will provide information from the building survey.
- e. The Project Manager must notify the contractor if the project involves work in a restricted or confined space. The Project Manager and the contractor are responsible for following all requirements of the [Restricted and Confined Space Policy](#).

3.0 **Prior to Project Start Date**

- a. The contractor must provide copies of the SDS' for products that could impact the health and safety of building occupants.
- b. Contractors must carry comprehensive liability insurance and automobile liability insurance as per the contract agreement.
- c. The Project Manager must advise IP&C of the upcoming project and involve them during the planning stage. The requirements of the [Construction & Renovation Policy](#) must be followed and IP&C will review the containment strategies, waste removal, traffic patterns, impacts on ventilation and water systems as well as cleaning procedures. As required for Class III or IV work, IP&C will complete the checklist: *Risk Assessment & Prevention Measures for Healthcare Facilities Construction & Renovation*.
- d. As part of mould, dust & asbestos management, the Project Manager must notify OHS and IP&C of the project and obtain a *Construction, Renovation and Maintenance Permit* for any work that disturbs building materials or includes ceiling entry. The permit must be displayed in the work area for the duration of the work. This applies to capital or facility renewal projects.
- e. OHS will review procedures for asbestos work including containment, ventilation, air monitoring and final clean-up. OHS should also be consulted for MSDS/SDS review, restricted and confined space permits and a review of any other potential health or safety issue with the project (e.g. air quality).
- f. During the planning process, the Project Manager must consult departments that will be affected by the project to address health and safety concerns as well as logistics planning to minimize work disruptions.

- g. The Project Manager must provide contractors with the appropriate Sunnybrook policy requirements (e.g. Asbestos Management, Mould Response, Construction & Renovation, Restricted & Confined Space, etc.) as determined by the nature of the work.
- h. The Project Manager must provide the contractors with information on Code Brown and Code Red procedures at the hospital so that they are able to report and respond to any floods or fires in the construction area.
- i. The Project Manager is responsible for advising the contractor that construction areas must be secured at all times to prevent unauthorized entry and must ensure contractors follow procedures to comply with this requirement.
- j. IP&C, OHS or a designated third-party environmental consultant will inspect containment barriers prior to and during the work on a regular basis and advise the project manager of any concerns.

4.0 Policies & Training

- a. Contractors must follow the OHSA and regulations, all environmental protection legislation as well as the requirements of applicable Sunnybrook IP&C and OHS policies. Any violation of safety rules or regulations is justification for the immediate termination of a contract without further obligation on the part of Sunnybrook.
- b. All contracted workers must have WHMIS training as well as any other safety training relevant to the work (e.g. Asbestos Awareness, Confined Space training, Infection Prevention & Control procedures, etc).

5.0 Requirements for Onsite Work

- a. Contractors must ensure that onsite workers are supplied with and use appropriate safety equipment, personal protective equipment, and follow safe work procedures.
- b. Contractors are encouraged to get flu shots, particularly if they will be working in patient areas.
- c. All scaffolding must comply with applicable standards.
- d. A contractor shall ensure that any tools or equipment brought on hospital property are safe to use, meet applicable standards, and all equipment along with any safety devices are in good condition and functioning properly.
- e. The contractor is responsible for maintaining a clean work area free of debris. Once the work is finished, all equipment, tools, supplies and debris shall be removed by the contractor following IP&C, environmental, and asbestos procedures as required.
- f. Contractors requiring storage for flammables exceeding daily volumes must obtain permission from the Project Manager who will consult with the Fire Prevention Coordinator as required.
- g. IP&C will inspect renovated or newly-constructed patient care areas prior to occupancy.
- h. For projects with asbestos abatement, OHS and/or a third-party environmental consultant will evaluate clean-up and/or clearance sampling prior to moving forward after the abatement. Environmental Consultants for asbestos abatements must follow the requirements of Section 6.0 of the [Asbestos Management](#) policy pertaining to containment inspections and air monitoring.
- i. Project Managers and contractors must ensure pedestrian safety and access control in and around construction or renovation projects as per the [Falls Prevention](#) policy.
- j. Project Managers must notify contractors of required performance standards and enforce as necessary by warnings, "stop work" orders and removal from workplace.
- k. Contractors must adhere to the no smoking policy.

6.0 Incidents

- a. A contractor shall immediately notify the Project Manager of any employee incident, including potential critical injuries or fatalities to any person on hospital property that resulted, or may have resulted, in an injury, illness or property

damage. The Project Manager will follow-up with OHS as required. For critical injuries or fatalities, the Project Manager or Contractor Representative must page Sunnybrook Safety On-Call (7437 via locating). As there are dual responsibilities following a critical injury to a contractor, OHS will coordinate with the Project Manager and Contractor Representative regarding Ministry of Labour notification, investigations and reports.

- b. A contractor shall immediately notify the Project Manager of any breach in infection control or asbestos containment structure. The Project Manager will contact IP&C and/or OHS.
- c. If Contractors find an errant sharp e.g. needle during their work, they should notify their Sunnybrook contact to arrange for proper disposal. Contractors who have a needlestick injury should immediately seek medical care at the Occupational Health Clinic or the Emergency department if after hours.

6.0 Project Completion

- a. For any project work involving construction, installation or modification of new equipment or systems, the Project Manager must ensure that all appropriate start-up testing, commissioning or certifying is completed before final sign-off. This includes reviewing and documenting that project building materials and equipment meet pre-construction/renovation specifications and arranging required testing to verify materials and equipment are functioning properly.

APPENDICES AND REFERENCES:

REFERENCES:

- 1. Ontario Ministry of Labour. Occupational Health and Safety Act and Regulations for Industrial Establishments. 1990.

APPENDICES:

Forms listed below are available under [Contractor Sign offs](#)

- **Appendix B - Contractor Safety Checklist**

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Infection Control during Construction, Renovation and Maintenance

Sunnybrook Health Sciences Centre		Policy No:	IPAC-0006
Title	Infection Control during Construction, Renovation and Maintenance	Original: (mm/dd/yyyy)	01/01/2001
Category	Policies & Guidelines	Reviewed: (mm/dd/yyyy)	09/01/2007, 03/09/2010, 03/08/2012, 11/11/2013, 11/20/2017
Sub-Category	Infection Prevention & Control	Revised: (mm/dd/yyyy)	09/01/2007, 11/20/2017
Issued By:	Infection Prevention and Control		
Approved By:	Medical Advisory Committee		

The Sunnybrook Intranet document is considered the most current.

Please ensure that you have reviewed all linked documents and other referenced materials within this page.

POLICY STATEMENT:

It is a Sunnybrook Health Sciences Centre (Sunnybrook) policy to ensure that infection prevention and control guidelines and standards are adhered to with all health care facility planning, design, construction, renovation, maintenance and repair. The goal is to eliminate any infectious risks where possible and minimize those risks that cannot be eliminated from agents released or augmented because of actions undertaken within the health care facility.

DEFINITIONS:

Construction:

Minor or major building activities that disturb or modify building structures and systems; Includes new construction, renovation, maintenance, and repair work within or adjacent to the facility.

Construction Cleaning:

The complete removal of all debris and vacuuming the entire area with a HEPA equipped unit. Wet mopping of area is permitted, dry sweeping is not.

Constructor:

A person who undertakes a construction or renovation project for an owner; May be a contractor, subcontractor, construction manager, consultant, or tradesperson.

Fungus:

A diverse group of saprophytic and parasitic spore-producing organisms usually classified as plants that lack chlorophyll and include moulds (filamentous fungi), rusts, mildews, smuts, mushrooms, and yeasts.

HEPA (High-Efficiency Particulate Air) filter:

An air filter with an efficiency of 99.97% in the removal of airborne particles 0.3 μ or larger.

Mould:

A growth of filamentous fungi, with a portion growing into damp or decaying organic matter and a visible surface growth, which usually assumes a fluffy appearance. Examples of environmentally significant filamentous fungi include *Aspergillus* and *Stachybotrys*.

Nosocomial Infection:

Infections that originate in a healthcare setting.

Project Manager (PM):

The lead representative from Corporate Planning and Development, Facilities Services and Others, responsible for the maintenance, construction or renovation project. The PM will advise I of any scheduled construction/renovation projects and ensure that IP&C requirements are addressed and adhered to from the start of the project.

Negative Pressure Differential:

Use of HEPA filtration units within the work zone to direct air flow from the corridors, or any adjacent area, into the work zone, ensuring that contaminated air cannot escape from the negative pressure room to other parts of the facility. Negative pressure differential with respect to all adjacent building areas is not less than 7.5 Pa (0.03 in wc).

PROCEDURE:**1. Planning and Design Phase:**

An interdisciplinary design team shall be assembled early on in the design process and must include an infection prevention and control representative. Designs shall incorporate the latest guidelines for design and construction of health care facilities (e.g. AIA, CSA). Subjects to be reviewed during the design phase include, but are not limited to, the following:

1. Number, location and type of airborne infection isolation rooms
2. Air-handling and ventilation needs in special areas such as operating theatres, critical care units, laboratories, etc.
3. Water systems to limit exposure to opportunistic water-borne organisms
4. Minimum spacing requirements
5. Sink selection and placement (see [Sink Standards](#))
6. Finishes and surfaces
7. Assessment of risks related to the project utilizing the Risk Assessment and Preventative Measures Checklist. The determination of risk will guide the need for barriers during the construction/renovation project, and will allow for the associated costs to be incorporated into the appropriate budgets/tender documents

2. Pre-Construction Phase:

At project start-up meeting, at meetings convened prior to the start of each Stage of the Work,

at pre-installation meetings, and at regular progress meetings, infection prevention and control procedures are to be reviewed. The designated infection prevention and control representative shall attend such meetings. Subjects to be reviewed include, but are not limited to, the following:

- General outline of infection prevention and control requirements
- Identification of patient populations that may be at risk
- Prevention measures required during disruption of essential services (e.g. water, ventilation systems, electricity)
- PM is responsible for completing the online [Construction, Renovation and Maintenance Permit](#) to determine preventive measures required for each project
- The integrity of the facility's exterior structure, spatial separations, ventilation and water supplies for any infection control problems are reviewed and assessed
- Methods for dust containment and removal of construction debris are outlined
- Traffic patterns for construction workers and supply delivery routes will be established
- Needs assessment for increased filter changes during construction
- The need to close down dampers temporarily to reduce circulation of contaminated air or fumes is assessed
- Impact of air systems (correct air exchange rates and pressure relationships) in critical areas near construction activity
- Site inspection checklist
- Provisions for ceiling/wall access

3. **Construction Phase:**

a. **Post Construction, Renovation and Maintenance Permit at the entrance to the area of construction**

b. **Dust Control**

Risk assessment of work zone shall be undertaken by IP&C, in conjunction with Project Manager at beginning of project. Preventative measures will be implemented to control the migration of dust particles from the work zone to adjacent areas. Methods will vary depending on the location, type of construction activity and population at risk.

c. **Heating, Ventilation, Air Conditioning (HVAC)**

All intake and exhaust vents/grills within work zone must be identified prior to construction. Where dust will be produced these vents/grills must be sealed off prior to construction to prevent contamination of HVAC system.

Occupied spaces adjacent to the work zone must have functioning HVAC systems throughout the project. All shutdowns affecting occupied areas must be communicated to IP&C in advance to determine if alternative means of air are required.

At the beginning and for the duration of construction/excavation outside/adjacent to the facility all intake grills will be identified and covered with a filter to prevent contamination. The internal pre-filter and primary filter for these air intakes will be monitored throughout the project and changed as required. IP&C and the Project Manager will monitor the HVAC system and determine if air monitoring is necessary.

d. **Plumbing**

IP&C is to be notified in advance of all water and steam shutdowns. Appropriate procedures must be followed throughout the project to ensure the potability of the water in the health care facility.

e. **Risk Reduction**

High risk populations must be moved to an area away from the construction zone if air

quality cannot be ensured during construction. Do not transport any patients through the construction zone. Staff, patients and visitors are not permitted to enter the construction work area. Provisions will be made throughout the project to ensure that fire/emergency exits are not compromised.

Breaches in pre-specified infection control preventative measures, as outlined in [Appendix I](#), that place staff and/or patients at risk will result in “stop” construction orders to the Project Manager and Site Foreman by Infection Prevention and Control. An Infection Prevention and Control Inspection Report shall be provided by IP&C outlining the deficiencies.

f. Surveillance

IP&C will conduct a pre-work inspection once all preventive measures are instituted and prior to the commencement of any work. An inspection report outlining deficiencies and permitting the project to proceed will be sent electronically to the PM involved ([Appendix II](#)). IP&C will perform regular site inspections to ensure continued compliance with assigned preventative measures and barrier integrity. The **Infection Control/Occupational Health and Safety Sign-off** ([Appendix III](#)) will be used for these inspections and is provided as part of the *Construction, Renovation and Maintenance Permit* and is to be posted at the worksite.

g. Constructor Duties

It is the responsibility of the constructor to ensure that all personnel on-site are trained and compliant with the IP&C preventive measures. Constructors are not permitted to use elevators in use by visitors/staff/patients. Where separate elevators are not available for use by the constructor specific times will be designated. Prior to construction IP&C, Project Manager and the Project Team will establish paths, times and procedures for the transportation of clean/sterile supplies, equipment and construction materials, including removal of construction debris. Constructors are required to follow the designated routes for entry/exit to and from the work zone to the outside.

h. Mould

If mould is discovered during construction IP&C and Occupational Health and Safety must be notified and they will report to the Joint Occupational Health and Safety Committee. Please refer to [Mould Response Policy](#) for further information.

4. Post-Construction Phase:

a. Stages of Cleaning

Constructor is responsible for cleaning the work zone and adjacent zone on a regular basis throughout the project as per [Appendix I](#). The work zone must be cleaned prior to and at completion of work prior to user hand off and before the following:

- Prior to reopening a supply air duct (to be completed by Constructor)
- Prior to removal of containment barriers (to be completed by Constructor)
- After the removal of containment barriers (to be completed by Sunnybrook Environmental Services)

b. At completion of project the HVAC system must be inspected for evidence of dust/water contamination and cleaned if necessary prior to user hand off.

If the HVAC was turned off for the project then it must be re-commissioned prior to user hand off. Documentation shall be provided to Infection Prevention and Control regarding cleaning of HVAC system, viability of HEPA filters (if applicable), air balancing and direction of air flow.

At the completion of construction, prior to containment barrier removal IP&C is to be notified to inspect.

Appendix II ([Click here to read / print Appendix II](#))

Date: _____ Time: _____

Location: _____ Inspector: _____

Construction/Renovation/Repair site has been checked for:

ITEM	COMPLIANCE?		
	Y	N	N/A
1. Construction Barriers			
Infection Control Permit/Sign off posted outside work area			
Airtight plastic or drywall barriers extend from floor to ceiling			
All airtight penetrations sealed with heavy tape			
All remaining hospital equipment, doors, holes, conduits, unused windows, outlets in work area covered with poly and sealed			
Doors to anteroom and work site remain securely closed			
Upper seals intact			
Portable containment cube intact, labeled and completely sealed			
Portable HEPA vacuum or HEPA filtration unit attached outside cube and turned on during ceiling/wall access			
2. Negative Air			
Y	N	N/A	
HVAC system has been isolated to prevent contamination of the duct system. Supply vents are blocked and return vents are filtered			
Equipment to prevent airborne particulates from escaping work area are used appropriately (e.g. portable HEPA filter units/filtered vacuums, exhaust fans)			
Doors to anteroom and work site remain securely closed			
Portable HEPA filtration unit is well secured (clamped hose) and ducted properly			
Work site is at negative pressure to surrounding areas (0.03kpa)			
Contractors properly attired (coveralls/booties put on over clothing) prior to entering work zone			

3. CLEANLINESS OF AREA	Y	N	N/A
Protective clothing properly removed and disposed of, or existing clothing properly vacuumed in ante-room prior to leaving work area			
Sticky mats or adhesive strips are clean and available at doorways for shoe dust collection			
No visible dust or footprints outside of work zone			
Anteroom is intact and free of debris/dust			
Sticky mats are fresh and available at doorways for dust collection			
Construction area cleaned daily.			
Demonstrated compliance with traffic patterns, both construction worker and supply/debris removal.			

COMMENTS/NOTES

• Any major deficiencies should be addressed immediately. Non-compliance should be brought

to the attention of the Project Manager (refer to Infection Control Risk Assessment 1004)
• This monitor checklist will be completed periodically for the duration of the construction/renovation/repair project.
Appendix III (Click here to read / print Appendix III) will be maintained by Infection Prevention and Control



Appendix III

Infection Control/Occupational Health and Safety Sign-off

Project Name/Location: _____

Project Manager: _____

Contractor: _____

Initial sign-off (Infection Prevention and Control):

Date: _____ Signature: _____

Initial sign-off (Occupational Health and Safety):

Date: _____ Signature: _____

To be completed by IPC/OHS

Date	Walk-off (sticky) mats in place and in good condition	Negative pressure of 7.5 Pa (0.03 in wc) continuously monitored	Containment is well sealed	Comments/Correction actions	Initials
	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No		
	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No		
	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No		
	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No		
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	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No		
	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No		

(November 2017)

APPENDICES AND REFERENCES:

STAKEHOLDERS:
Plant Operations and Maintenance

REFERENCES:

1. Bartley JM and the 1997, 1998 and 1999 APIC Guidelines Committee. *APIC state-of-the-art report: the role of infection control during construction in health care facilities*. Am J Infect Control 2000;28(2):156-69
2. American Institute of Architects Academy of Architecture for Health. *Guidelines for design and construction of hospital and health care facilities*. Washington: American Institute of Architects Press, 2006.
3. Canadian Standards Association. *Canadian Health Care Facilities (Z8000-11)*. Etobicoke: Canadian Standards Association, 2016.
4. Canadian Standards Association. *Infection Control during Construction or Renovation of Health Care Facilities (Z317.13-12)*. Etobicoke: Canadian Standards Association, 2012.
5. Canadian Standards Association. *Special Requirements for Plumbing Installations in Health Care Facilities (Z317.1-09)*. Etobicoke: Canadian Standards Association, 2009.
6. Canadian Standards Association. *Special requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities (Z317.2-10)*. Etobicoke: Canadian Standards Association, 2015.
7. N.Y. City Dept. of Health. 2000. *Guidelines on assessment and remediation of fungi in indoor environments*. New York City Dept. of Health, New York, NY.

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Restricted & Confined Space Program

Sunnybrook Health Sciences Centre		Policy No:	HR-109
Title	Restricted & Confined Space Program	Original: (mm/dd/yyyy)	06/01/2005
Category	Human Resources	Reviewed: (mm/dd/yyyy)	02/10/2022
Sub-Category	OccHealth & Safety	Revised: (mm/dd/yyyy)	Feb. 2007, Nov. 2009, Dec. 2011, Dec. 2012, Nov. 2015, Jan 2020
Issued By:	Human Resources		
Approved By:	Senior Leadership Team		

The Sunnybrook Intranet document is considered the most current.
Please ensure that you have reviewed all linked documents and other referenced materials within this page.

POLICY STATEMENT:

It is a Sunnybrook Health Sciences Centre policy to establish procedures to safely manage work in areas or in equipment meeting the criteria for confined or restricted spaces in accordance with requirements of the Occupational Health and Safety Act, Health Care Regulation, O.Reg. 67/93, and Confined Space Regulation, O. Reg 632/05.

This policy applies to all employees and contractors engaged in confined space and restricted space entry (at all Sunnybrook campus).

The procedures in **Sections 1.0-15.0** of this document outline the requirements for:

1. **Identification of Restricted or Confined Spaces**
2. **Hazard Assessment**
3. **Entry Plan**
4. **Coordination Document**
5. **Entry Permits & Entering Confined/Restricted Spaces**
6. **Training**
7. **Emergency Response & Equipment**
8. **Isolation & Control of Material Movement**
9. **Atmospheric Testing**
10. **Ventilation & Purging**
11. **Explosives, Flammables or Combustibles**
12. **Warning Signs & Barricades**
13. **Equipment in Confined Spaces**
14. **Contractors**
15. **Records**

DEFINITION(S):

Atmospheric Hazard

Atmospheric hazards include an accumulation of flammable, combustible, or explosive agents; an oxygen content below 19.5% or above 23%; an accumulation of contaminants such as gases, vapors, fumes, dusts or mists that could result in health effects that pose an immediate threat to life or could interfere with a person's ability to escape unaided.

Competent Person

A person who: i) is qualified because of knowledge, training, and experience organizing the work and its performance ii) is familiar with the Occupational Health and Safety Act and its regulations and iii) has knowledge of any potential or actual danger to health or safety in the workplace.

Cold Work

Work without a source of ignition or that does not generate a spark or flame.

Hot Work

Work with a source of ignition or work that generates a spark or flame.

Confined Space

A fully or partially enclosed space that is not designed or constructed for human occupancy and in which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it.

Lead Employer

An employer who contracts external services to do confined/restricted space work.

Lower Explosive Limit (LEL)

The lowest concentration of a flammable gas or vapor in air that could flash or cause a fire in the presence of a spark or flame (also referred to as Lower Flammable Limit, LFL).

Upper Explosive Limit (UEL)

The highest concentration of a flammable gas or vapor in air that could flash or cause a fire in the presence of a spark or flame (also referred to as Upper Flammable Limit, UFL).

Project Leader

The person responsible for a particular construction or maintenance project; includes but is not limited to: staff from Corporate Planning & Development, Facilities Planning; Facilities Services, Plant Operations & Maintenance; Building Managers etc.

Purging

The process of displacing contaminants from a confined space.

Qualified Person

A worker who, because of knowledge, training and experience, is capable of performing a duty safely and properly.

Related Work

Work that is performed near a confined/restricted space in direct support of the work inside the confined/restricted space.

Restricted Space

A tank, vat, vessel, duct, vault, boiler or other space from which the egress of a worker is restricted, limited, or impeded because of the construction, design, location or other physical characteristics of the space.

ROLES AND RESPONSIBILITIES

Employer:

- Control access to and authorizing work in confined and restricted spaces.
- Ensure employees are informed of the existence, location of, and the danger within confined and restricted spaces by posting danger signs or by any other

equally effective means

Manager/Supervisor/Project Leader

- Ensure staff and/or contractors working under their supervision understand the general and specific procedures, and know how to conduct their confined/restricted space tasks safely
- Ensure staff and/or contractors conducting work related to confined/restricted spaces are adequately trained.
- Provide staff with all specified equipment required for entry in a confined or restricted space as outlined in this program, maintain the equipment, and ensure that employees use that equipment properly
- Inform contractors entering the space must be informed of all aspects of the hazard assessment, control plan and testing results.
- Provide plan-specific training, as required
- When contractors are used for confined/restricted space entry, verify that the contractors are adequately trained in confined/restricted space work and have appropriate personal protective equipment
- Prepare a coordination document if workers of more than one employer perform work in the same confined space or related work with respect to the same confined space and share this document to employer of each worker who performs work in the same confined space and JOHSC.
- Ensure a written entry plan and on-site rescue plan have been prepared specially for the space where confined/restricted space entry will be done.
- Maintain training records of their employees including the training provider and the type/date of the training, and share this record with Occupational Health and Safety.
- Complete confined space/restricted space entry permit and provide a copy of the permit to Occupational Health and Safety

Employees

- Will not enter any confined or restricted space unless specifically authorized by Sunnybrook after participating in the required training program
- Attend and complete any scheduled training required by their supervisor and this program
- When selected as an entrant or attendant, perform those duties as outlined in this program
- No employee shall enter a confined or restricted space without having a properly completed entry permit

Attendant:

- Know the hazards that may be faced during the entry, including the mode, signs or symptoms, and consequences of the exposure
- Remain outside the confined/restricted space during entry operations until relieved by another qualified attendant
- Attendant must not enter the restricted/restricted/confined space
- Attendant must be trained in first aid and CPR as well as in the rescue procedures and the use of the equipment.
- Be in constant communication with the entrant(s)
- Monitor activities inside and outside restricted/confined/restricted space to determine if safe for entrant to remain in space and orders evacuation when necessary.
- Summon rescue and emergency services when assistance for emergency exit from restricted/confined space if necessary.
- Perform no duties that might interfere with their primary duty to monitor and protect the authorized entrant
- Control activities at the entrance and keep unauthorized people away

Entrant:

- Be aware of all known and potential hazards of the space as well as be capable of performing the work.
- Properly use equipment as required
- Remain in constant communication with the attendant is required

- Exit the space immediately if so ordered by the attendant

Occupational Health and Safety.

- Restricted or confined spaces will be identified by Plant Operations and Occupational Health and Safety and reviewed by the Joint Occupational Health and Safety Committee (JOHSC)
- Maintain inventory of all restricted/confined spaces on each campus

Joint Occupational Health and Safety Committee (JOHSC).

- A written confined/restricted space program must be maintained in consultation with the Joint Occupational Health and Safety Committee (JOHSC).

POLICY:

1. Identification of Restricted or Confined Spaces

- Restricted or confined spaces will be identified by Plant Operations and Occupational Health and Safety and reviewed by the Joint Occupational Health and Safety Committee (JOHSC).
- An inventory of confined and restricted spaces at each campus can be found on [Sunnynet](#). Where a space is not listed on the inventory and there are no signs posted, then a hazard assessment must be completed to determine if the space meets the requirements of a confined or restricted space.
- Even if a space does not meet the definition of a confined or restricted space, every precaution reasonable in the circumstances must be taken to protect workers entering the space

2. Hazard Assessment

- An assessment must be carried out **before any worker enters a confined space**. A competent person must complete and sign a written assessment of the hazards for a confined/restricted space with consideration for but not limited to potential atmospheric hazards, design, construction, location, use or contents of the space. This information will be documented on the entry permit.
- Copies of the assessment must be available upon request from the JOHSC / Safety Representatives of workers performing the confined/restricted space work and the workers themselves.
- Where two or more confined spaces are similar in construction and present the same hazards, the assessment for each specific confined space may be recorded in a single document. The specific confined space(s) to which each assessment applies must be clearly identified in the assessment.
- The assessment must be reviewed as often as necessary to ensure the plan remains adequate.

3. Entry plan

- Before any worker enters a restricted/confined space, the project leader shall ensure that a competent person completes a written entry plan and onsite rescue plan have been prepared specifically for that space and the work to be done in it. The entry plan is a set of measures and procedures to control all hazards identified by the assessment for that restricted/confined space to allow workers to enter and work safely. Individual departments are responsible for developing these specific procedures that relate to their work
- The plan shall include the following:
 - Duties of workers
 - On-site rescue procedures rescue equipment
 - Isolation of energy & control of materials movement
 - Atmospheric testing
 - Adequate procedures for working with explosive or flammable substances
 - Methods of communication
 - Inspection of equipment personal protective devices equipment, or clothing

- Adequate means of entering & exiting
- Ventilation & purging attendants
- Coordination document (where applicable)
- The information will be documented on the entry permit.
- The control plan must be reviewed as often as necessary to ensure it remains adequate.

4. Coordination Document

- If workers from more than one employer (e.g. Sunnybrook staff and a contractor) are working in the same confined/restricted space or doing related work with respect to the same restricted/confined space, then the project leader must prepare a co-ordination document to ensure that all confined/restricted space duties are performed to protect the health & safety of all workers.
- A copy of the coordination document must be provided to each employer and the Safety Representative of each employer with workers performing confined/restricted space work.

5. Entry Permits & Entering Confined/Restricted Spaces

- The Project Leader must ensure the confined/restricted space entry permit is complete prior to anyone entering the space. The permit must be made available to all employees or contractors who will enter the space or perform related work.
- The permit must have the following:
 - Information the location of the ace
 - A description of the work being performed
 - The time period for which the entry permit applies
 - Name of each entrant and a record of their entries and exits
 - Name of the attendant
 - A description of the hazards and corresponding control measures
 - If there is hot work, a description of appropriate measures and procedures
 - A list of emergency equipment and verification that the equipment is in working order
 - Results from atmospheric testing
- Before each shift, a competent person shall verify that the entry permit complies with the relevant plan
- The entry permit must be updated with any new information during the time of entry such as changes in air testing results or problems encountered during the entry.
- Each confined/restricted space must have an adequate means for entering and exiting the space.
- Each restricted/confined space must have its own, separate entry permit

6. Training

- Every worker who enters a confined/restricted space or performs related work must have adequate training from a qualified person on safe work practices, following the control plan, and recognition of hazards.
- Managers/supervisors are responsible for identifying employees who require training
- Training will be assessed by Plant Operations and Maintenance and/or Occupational Health and Safety whenever there is a change in circumstances that may affect the safety of a worker in a confined/restricted space.
- The records may be incorporated into an entry permit

7. Emergency Response & Equipment

- The Project Leader must ensure a written emergency rescue procedure prior to a confined/restricted space entry based on the hazards identified in the hazard assessment and the control plan. The emergency rescue procedure shall be approved by the Supervisor in charge of the restricted/confined space work. Communication methods appropriate for the hazards must be established and made available to the workers and the attendant.
- If the control plan requires emergency equipment for serious health hazards such as potential engulfment, entrapment, the equipment must be readily available and appropriate for the parameters of the space.

- Emergency equipment must be inspected by a competent person as often as necessary to ensure proper working order. The project leader overseeing confined/restricted space work must maintain equipment inspection records.
- Each worker entering the confined/restricted space must be provided with Personal Protective Equipment (PPE) and safety equipment as indicated by the control plan and based on the air monitoring results.
- Emergency response personnel must have and be trained to use the emergency PPE as described in the control plan. A self-contained breathing apparatus or air-supplied respirator with an escape bottle must be used during rescue operations in an unknown or Immediately Dangerous to Life or Health (IDLH) atmosphere.

8. Isolation and Control of Material Movement

- Prior to each restricted/confined space entry, there must be adequate protection against:
- Contact with moving equipment parts inside the restricted/confined space by disconnecting the equipment from its power source, de-energizing, locking out and tagging out. If the above measures are not possible, immobilize the equipment by blocking or other means.
- Contact with electrical energy by disconnecting, de-energizing, locking & tagging the source of electrical energy or other means.
- Release of hazardous substances or energy by blanking, disconnecting piping or other adequate means. Drowning, engulfment, entrapment or other related hazards.
- LOTO & only those trained to perform LOTO shall install locks/tags

9. Atmospheric Testing

- Workers are not permitted to enter the work space if any atmospheric hazard is present including:
 - an oxygen content outside of the acceptable 19.5%-23% range
 - flammable, combustible, or explosive agents;
 - an accumulation of contaminants such as gases, vapors, fumes, dusts or mist that could result in health effects that pose an immediate threat to life or could interfere with a person's ability to escape unaided.
- Prior to each entry, a qualified person must perform atmospheric testing to determine oxygen content, and the presence of combustible or toxic gases/vapors.
- Testing must be repeated as often as necessary to ensure atmospheric conditions are within acceptable limits during the restricted/confined space work.
- The instrumentation for the testing must be calibrated, in proper working order and appropriate to test the atmospheric hazards identified in the hazard assessment.
- Results of all testing are to be documented on the restricted/confined space entry permit.

10. Ventilation & Purging

- If the oxygen level is outside of the acceptable range (19.5-23%), the confined space must be purged and/or ventilated before workers enter the confined space.
- To ensure adequate ventilation, the points of air supply and exhaust should be separated as far as possible. Openings must be provided for the entry of clean replacement air and/or to allow air to be exhausted. Pure oxygen must not be used to ventilate a confined space
- If mechanical ventilation is to be used, there must be adequate warning of a failure.
- If purging or ventilating is not practical or if an atmospheric hazard exists or is likely to exist, the workers entering the confined space must use appropriate respiratory protective equipment.
- Any respiratory equipment used by workers in a confined space must be inspected by a qualified person and be in good working order.

11. Explosives, Flammables or Combustibles

- No worker can enter or remain in a confined space that contains or is likely to contain an airborne combustible dust, or mist which an atmospheric concentration may create an explosion hazard
- If an explosive or flammable gas or vapor is present, the confined space can be entered only if the gas or vapor levels do not exceed:
 - 25% of LEL (For **Inspection Work**, no source of ignition)
 - 10% of LEL (For **Cold Work**, no source of ignition, flame or heat)
 - 5% of LEL (For **Hot Work**, generates heat, fire or spark) and the following must be implemented:
 - An assessment confirms safety
 - A qualified person implements adequate protective procedures a hot work permit is issued
 - An attendant is in place atmospheric testing is continuous
 - The oxygen content does not exceed 23% and an adequate alarm is in place to alert if the gas or vapor exceeds 5% of LEL or oxygen content exceeds 23%
 - The above measures do not apply if the atmosphere in the confined space has been made inert by inert gas, there is continuous monitoring and the worker has appropriate respiratory protective equipment.

12. Warning Signs & Barricades

- During restricted/confined space work, each entrance must be secured against unauthorized entry or have adequate warning signs and/or safety barricades.
- Additional signage and locks should be in place to identify and secure restricted/confined and restricted spaces.

13. Equipment In Confined Spaces

- Compressed Gas Cylinders
 - If compressed gas cylinders are required for the confined space work, the potential hazards and adequate controls must be considered in the hazard assessment and control plan.
- Torches and hoses
 - Torches and hoses used for welding, brazing or cutting should be removed from a confined space when not in use and when the confined space is vacated e.g. on breaks or lunches.
 - If removal is not possible, the equipment should be disconnected at the source or closed and tagged while workers are on breaks.
- Electrical equipment
 - Electrical tools and equipment used in a confined space must be grounded or double insulated.
 - If wet or damp conditions exist inside the space, tools must be protected by an approved Ground Fault Circuit Interrupter (GFCI).
 - Electrical tools and equipment used in a confined space where flammable vapours of explosive gases, or liquids are present must be Canadian Standards Association (CSA) approved for hazardous locations classified under CSA Standard C22.1, Canadian Electrical Code, Part I (24th Edition), Safety Standard for Electrical Installations, as Class 1, Division 2, Groups A, B and C.
 - Only non-sparking tools may be used in a confined space where flammable or explosive gases, vapours or liquids are present.
- Chemicals
 - Chemicals that will be used in the confined space should be evaluated in the hazard assessment and control plan
 - The Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS) of any product used in the confined space must be kept with the hazard assessment.

14. Contractors

- Project Leader shall ensure any contractors performing work in confined/restricted space shall be informed that the area is considered as such. The elements of the confined/restricted space program must be followed and the

contractor entering the space must be informed of all aspects of the hazard assessment, control plan and testing results.

- The Project Leader overseeing the contract work must verify that the contractors are adequately trained in confined/restricted space work and have appropriate personal protective equipment

15. Records

- All records including permits, hazard assessments, control plans, and training records, must be kept by the Project Leader for the longer of:
 - One year or;
 - The time period to have the 2 most recent records for each confined/restricted space

APPENDICES AND REFERENCES:

1. Ontario Ministry of Labour. Occupational Health and Safety Act, ONTARIO REGULATION 632/05, RESTRICTED AND CONFINED SPACES. Ottawa, 2011.
2. Ontario Ministry of Labour. Occupational Health and Safety Act, ONTARIO REGULATION 67/93, HEALTHCARE AND RESIDENTIAL FACILITIES
3. [List of confined/restricted spaces](#)
4. [Restricted/Confined Space Permit](#)

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Falls Prevention

Sunnybrook Health Sciences Centre		Policy No:	HR-0095
Title	Falls Prevention	Original: (mm/dd/yyyy)	12/01/2007
Category	Human Resources	Reviewed: (mm/dd/yyyy)	10/13/2022
Sub-Category	OccHealth & Safety	Revised: (mm/dd/yyyy)	10/10/2017
Issued By:	Human Resources		
Approved By:	Joint Health & Safety Comm.		

The Sunnybrook Intranet document is considered the most current.
Please ensure that you have reviewed all linked documents and other referenced materials within this page.

POLICY STATEMENT:

It is a Sunnybrook Health Sciences Centre (Sunnybrook) policy to ensure precautions are in place to minimize the risk of slips, trips and falls (both same level and from heights) within the hospital and on the grounds. This policy includes requirements for ladders, step stools and guardrails. The hospital recognizes the importance of a safe environment for employees, physicians, volunteers, students, patients and visitors.

POLICY:

The following practices will reduce the risk of falls

1.0 Environmental Services will:

Within Hospital Buildings

- Check that rugs and carpeting are in good condition (e.g. free of bulges, rips), and securely attached to the floor.
- Place warning signs/barriers when cleaning floors. Care must be taken to remove water and/or floor products after cleaning.
- Wash half of the hallway at a time so that there is a dry area for walking.
- Provide regular removal of garbage, linen, discarded equipment etc. to keep rooms and corridors clear.
- Provide timely response to spills or leaks to remove any slip hazard.

Exterior Grounds

- Remove snow/ice promptly from pedestrian routes, parking lots/garages, and bus stop areas and/or provide salt/sand.
- Maintain landscaped areas on hospital property.

2.0 Maintenance will:

Within Hospital Buildings

- Fix damage to stairwell treads, risers and handrails.
- Replace/repair lighting in corridors, rooms and stairwells.
- Address plumbing leaks.
- Unclog floor drains to remove water from shower and washroom areas.

Exterior Grounds

- Complete semi-annual inspections of roads, sidewalks and parking areas.
- Make repairs on items identified during inspections or forward items to appropriate department for follow-up e.g. Environmental Services, Parking and Transportation, Corporate Planning, external contractors.
- Use anti-slip surface finishes in parking garages and on stairs.

3.0 Parking & Transportation will:

Exterior Grounds

- Address damaged walking surfaces in parking lots and structures.
- Ensure any vehicle fluid leaks that occur in parking areas are addressed appropriately.

4.0 Corporate Planning/Contractors:

Within Hospital Buildings

- Ensure corridors, stairwells in or around construction or renovation projects are safe for use by keeping areas free from debris or clutter.
- Provide appropriate signage to direct employees/visitors towards alternate routes if construction projects will impact passageways.
- Ensure secure construction areas are secured and that there is signage indicating that only authorized personnel can access construction areas.
- Employees authorized to go into construction areas must wear appropriate protective footwear as per the [Footwear Policy](#).

Exterior Grounds

- Ensure signage and barriers are in place to keep pedestrians away from construction areas.
- If construction projects will impact pedestrian areas, project managers must ensure a safe alternative e.g. temporary sidewalk, cordoned off area, or flag person as appropriate. Project Manager must ensure temporary or new sidewalks are accessible for wheelchairs and scooters.

5.0 Safe Work Practices for All Employees

- Wear appropriate footwear for the weather conditions, work tasks and work areas. Refer to the [Footwear Policy](#) for specific guidelines.
- Promptly report lighting problems or damage to carpet, floors, stairs, handrails etc. by submitting an online maintenance request.
- Report grounds maintenance concerns e.g. damage to sidewalks, damaged street lights to maintenance.
- Report snow/ice removal concerns to Environmental Services (ext. 4555).
- Immediately clean up small spills (e.g. coffee) or block area and contact Environmental Services (ext. 4555).
- Follow Environmental Service signage, barriers and instructions on safe areas to walk following a spill or during floor cleaning.
- Keep work areas and corridors free from clutter.
- Never carry a load that blocks vision or is difficult to balance. Carry smaller loads or use a cart.
- Minimize trip hazards due to cords by using ties to bundle computer/telephone cords, keeping cords away from walking surfaces or taping down/covering cords. Information Services will secure cords, contact by emailing sbiscallcentre@sunnybrook.ca. **The use of cordless devices is also encouraged.**
- Use established pedestrian routes rather than shortcuts.

- Exercise caution on stairs, use the handrails and slow down. If you are carrying an item with both hands, use the elevator rather than the stairs.
- Only use proper ladders or step stools; do not stand on chairs or other equipment, see Section 7.0.
- Avoid distracted walking by not using cellphones, tablets etc. while walking.

6.0 Joint Health Occupational & Safety Committee (JOHSC) & Department Safety Committees will:

- Complete regular inspections including checking for slip or trip hazards such as cords, damaged flooring, loose handrails, corridor or room clutter, damaged ladders or ladders that are not stored securely e.g. on hooks or chained to a surface.
- Inspect the exterior grounds as part of the annual JOHSC inspections.

7.0 Ladder/Step Stool Safety (also see Appendix 1)

- Follow any manufacturer's instructions or department procedures for the specific equipment.
- Step stools must have non-slip feet, be stable and in good condition.
- Inspect ladder prior to each use (see Appendix 1) and remove defective ladders from service until repaired.
- Ladder must have appropriate load capacity and be either an industrial or trade ladders (based on CSA rating). Household ladders are **not** to be used.
- Select proper ladder length and material type for the job and location.
- All ladders must have non-slip feet.
- Place ladder on solid and level base and for straight ladders ensure support surface is stable, and secure against slipping.
- If ladder will be used in a doorway or passageway, a second person must be stationed to direct traffic or a barrier/warning signs or tape must be in place.
- Ensure step ladder spreaders are locked into place.
- Ensure footwear is clean, dry and in good condition before climbing a ladder.
- Face ladder and do not overreach from the ladder, maintain 3 points of contact at all times (e.g. 2 feet and 1 hand) and keep centre of body/belt buckle within the ladder rails. If not aligned with work area, step down from ladder, move ladder to proper location, secure it and then step back onto ladder.
- For step ladders, don't stand on top 2 rungs, for straight ladders, don't stand on top 3 rungs.
- Instead of carrying objects in your hands, use a tool belt, hoist or have the items handed up.
- Only one person can use a ladder at a time.
- Ladders that are not in use, must be stored securely (e.g. on wall hooks or chained to surface).
- For outdoor use, take extra precautions if windy (secure ladder) and ensure rungs are dry and free from snow or ice.

8.0 Guardrails

• A guardrail is required:

- around the perimeter of uncovered openings in the floor, roof or other surface
- at the open side of a raised floor, mezzanine, balcony, gallery, landing, platform, walkway, stile, ramp or other surface
- at the open side of a vat, bin, or tank the top of which is less than 107 cm above the floor, platform, ground or surface
- around a machine, electrical installation, place or thing that is likely to endanger the safety of a worker

Guardrails are **not** required for loading docks, pit for vehicle maintenance, roof accessed for maintenance only, swimming pool/therapy pool or an auditorium/lecture theatre stage.

- A guardrail must meet requirements of Parts 3 & 4 of the Ontario Building code or must:
 - have horizontal top rail between 91 – 107cm above surface
 - have an intermediate rail midway between the top rail and surface

- have a toe board extending at least 125 mm, if tools or other objects may fall on a worker
- be free of splinters or other hazardous protrusions

APPENDICES AND REFERENCES:

APPENDIX 1: Ladders: Inspection and Securing

Prior to each use, inspect to ensure:

- Rungs, rails, steps and pail shelf are in good repair (no cracks or splinters, not bent or loose, not slippery, no missing parts)
- Spreaders are sturdy, tight, open fully and lock into place securely
- Nuts, bolts, rivets etc. are in place, in good condition and tight
- Ladder is clean and no signs of corrosion
- Anti-slip feet are in place and in good condition
- No sharp edges on rungs or rails
- For extension ladders, ropes and pulley are in good repair (not frayed or worn) and lubricated

Securing ladders and inclines:

- If the ladder is between 6-9 metres in length, it must be securely fastened or held in place by one or more co-workers
- For ladders beyond 9 metres in length, it must be securely fastened or stabilized to prevent tipping or falling.
- The top of a straight ladder must extend at least 0.9 metres above landing or support surface
- If ladder is not securely fastened, it must be inclined so that the horizontal distance from the top support to the foot of the ladder is between $\frac{1}{4}$ and $\frac{1}{3}$ the length of the ladder.

REFERENCES:

1. Ontario Ministry of Labour. Occupational Health and Safety Act and Regulations for Industrial Establishments. 1990.

RELATED POLICIES:

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Asbestos Management

Sunnybrook Health Sciences Centre		Policy No:	HR-0089
Title	Asbestos Management	Original: (mm/dd/yyyy)	06/01/2005
Category	Human Resources	Reviewed: (mm/dd/yyyy)	03/10/2022
Sub-Category	OccHealth & Safety	Revised: (mm/dd/yyyy)	Dec. 2006, Jun. 2009, Oct. 2010, Nov. 2011, Sept. 2013, Mar. 2017, Mar 2021
Issued By:	Human Resources		
Approved By:	Senior Leadership Team		

The Sunnybrook Intranet document is considered the most current.

Please ensure that you have reviewed all linked documents and other referenced materials within this page.

POLICY STATEMENT:

It is Sunnybrook Health Sciences Centre's (Sunnybrook) policy to adhere to all necessary measures and procedures by means of engineering controls, work practices, hygiene practices and facilities to ensure the time-weighted average exposure of a worker to any of the forms of airborne asbestos, individually or collectively, is reduced to the lowest practical level and shall not exceed 0.1 fibers per cubic centimeter of air. Sunnybrook shall establish an Asbestos Management Program (AMP) as outlined under the Ontario Regulation 278/05: Designated Substance Regulation Respecting Asbestos on Construction Projects and in Buildings and Repair Operations, made under the Occupational Health and Safety Act.

This policy applies to every building owned or operated by Sunnybrook at all campuses and other locations (i.e. Pine Villa). This policy applies to every project owner, constructor, employer and worker who engages in the repair, alteration or maintenance of asbestos-containing material (ACM) where ACM is likely to be handled, dealt with, disturbed or removed.

The following sections outline the components of the Asbestos Management Program.

ROLES AND RESPONSIBILITIES

Managers and Supervisors shall:

- Ensure their staff adhere to the contents of this program
- Ensure their staff are familiar with the presence of asbestos-containing materials in their work area
- Ensure their staff do not disturb asbestos-containing materials
- Ensure occupants are notified of scheduled asbestos-related work in the work area
- Report damaged materials suspected to contain asbestos to OHS (Occupational Health & Safety).

Employees shall:

- Be aware of the present of ACMs in their work area ([Asbestos at Sunnybrook](#))

- Adhere to the contents of this program
- Report damaged materials suspected to contain asbestos to their supervisor
- Refrain from disturbing building materials containing or suspected to contain asbestos

Project Leader shall:

- Consult with the OHS, to jointly classify and plan all asbestos remediation activities.
- Ensure that a pre-job review of all maintenance, repair, and renovation or construction activity is conducted to verify that asbestos-containing materials will not be disturbed by such activities. In the case where asbestos-containing materials will be disturbed by maintenance, repair, renovation or construction activity, a [Construction, Renovation and Maintenance Permit](#) shall be completed.
- Communicate asbestos-related work to occupants of the affected area
- Ensure all contractors under their supervision are provided with a copy of the most recent Asbestos Inventory.
- Ensure all contractors under their supervision to conduct Type 3 asbestos work have appropriate training.
- Notify OHS and JOHSC in advance of any sampling or testing to be performed.
- Arrange for appropriate inspection and air monitoring of asbestos operations
- Forward asbestos-related documentation to OHS\

Occupational Health and Safety (OHS) shall:

- Ensure the asbestos inventory is available and kept up to date
- Provided the Project Leader, Plant Operations & Maintenance (POM) and/or Environmental Services (EVS) with a copy of the most recent asbestos survey as requested
- Notify the JOHSC of any sampling or testing
- Review and approve the CRMP, providing the recommended asbestos precautions as required.
- Administer medical surveillance requirements of the Asbestos Management Programs
- Respond to reports of asbestos disturbance or the discovery of previously undocumented locations of asbestos-containing material and ensure appropriate remediation and documentation procedures are followed
- Monitor compliance with the Asbestos Management Program

Joint Occupational Health and Safety Committee (JOHSC) shall:

- Be consulted prior to any asbestos sampling or inspections which may be required, and shall be given the opportunity to attend at the start of such activities
- Receive copies of all reports, sampling results and general information regarding any asbestos related activity

INVENTORY

A survey of the location of asbestos-containing materials (ACM) shall be completed and maintained. The survey shall contain the following information:

- Location of asbestos containing material
- For each material indicate whether the material is friable or non-friable
- An indication as to whether the material has been sampled to determine if it contains asbestos or whether it is assumed to contain asbestos
- If known to be asbestos, type of asbestos

The survey shall be updated every 12 months or as required to reflect any changes caused by construction, renovations or abatement.

OHS shall maintain copies of the survey. A copy of the survey is available upon request.

A summary of ACM is available on [Sunnynet](#).

INSPECTIONS AND HAZARD ASSESSMENT:

Period Inspections:

Inspection of the condition of ACM shall be conducted by a qualified consultant at reasonable intervals, at a minimum rate of once every year. The consultant shall determine identify locations and quantities of deteriorating ACM and generate a list of corrective actions.

Condition of ACM shall be classified as either good, fair, or poor. Fair and poor condition ACM shall be control either through repair, sealing, encapsulation or removal following appropriate asbestos precautions in accordance with O. Reg.278/05. OHS shall maintain documentation of these inspections in the form of a report issued by the consultant.

- POM will be responsible for all non-flooring corrective actions
- EVS will be responsible for all flooring corrective actions
- Corporate Planning and Development (CPD) will be responsible for any abatement or repair related to CPD project work
- POM, ES and CPD will be responsible for providing all asbestos-related records to OHS.

Hazard Reporting:

Damaged asbestos-containing material identified by employees during the course of their normal day-to-day activities shall be reported to the OHS who will ensure that appropriate remediation steps are taken.

Bulk Sampling

All materials that may contain asbestos must be sampled before requesting tenders or arranging for work (including non-friable materials).

Bulk sampling must be carried out on bulk material samples that are randomly collected by a competent worker and are representative of each area of homogeneous material.

The minimum number of bulk material samples to be collected from an area of homogeneous material is set out in Table 1 of O. Reg. 278/05. Three samples for most cases except for those listed in Table 1 of O. Reg. 278/05.

If analysis establishes that a bulk material sample contains 0.5 per cent or more asbestos by dry weight, the entire area of homogeneous material from which the bulk material sample was taken is deemed to be asbestos-containing material.

O. Reg. 278/05 references the prescribed test method and procedures for establishing whether material is asbestos-containing material and for establishing its asbestos content and the type of asbestos.

NOTIFICATIONS

Sunnybrook shall notify employees of the location of ACM through the Asbestos Management page on [Sunnynet](#). A copy of details reports can be provided as requested.

The project leader shall inform their employees and/or contractors when the work performed may bring them into contact or close proximity to ACM and they may disturb it.

TRAINING AND EDUCATION

Employees who work around and who may disturb asbestos containing material or who are responsible for managing, overseeing or coordinating such activities shall receive asbestos awareness training. Training will include

- Asbestos hazards
- Personal hygiene and appropriate work practices
- Use, care and disposal of respirators and protective equipment, including limitations, inspection and maintenance, proper fitting, respirator cleaning and disinfection.

Retraining is completed on a routine and as-needed basis

Employees involved in Asbestos Operations shall complete appropriate respirator fit testing as per Respiratory Protection Program. As such, the records of respirator fit tests will be maintained by the department.

Medical surveillance

To permit earlier detection of such diseases, O. Reg. 278/05 prescribes medical examinations for workers who work in Type 2 or Type 3 operations

BUILDING OPERATIONS

Classification of Asbestos:

Asbestos operations are as classified as Type 1, 2 or 3 as specified in O. Reg. 278/05. Refer to Appendix 1 for details outlining each type of operation.

Employees may engage in Type 1 or 2 asbestos operations provided they have completed the appropriate training. All 3 work must be contracted to fully qualified contractor

Routine Operations:

Prior to any planned maintenance or construction activity, the supervisor and/or project leader shall review the appropriate ACM Inventory, assess the probability that the work activity will, or will likely, disturb ACMs and determine the appropriate control measures (i.e. Type 1, 2, or 3).

If the activity will, or will, likely to disturb ACMs, the supervisor/project leader shall complete a [Construction, Renovation and Maintenance Permit](#). IPAC and OHS shall review and approve the permit.

If it is determined that ACM is present and will be disturbed by the work an inspection by OHS and/or IPAC is required.

- As part of tendering for a project, the project leader must provide a list of designated substances to all potential contractors who may work on the project. This list along with any inspections, reports or drawings must be included in any tendering information prior to the arrangement of the contract.
- If, in the course of work, material is discovered which was not identified in the asbestos assessment and report but which may be asbestos-containing material, work is stopped and the material is analyzed for asbestos content
- Project managers who oversee the work of asbestos abatement contractors are appropriately trained and competent

Infection Prevention and Control (IP&C)

In addition to asbestos precautions, IPAC controls as described in the Infection Control during [Construction, Renovation and Maintenance Policy \(IPAC-0006\)](#) shall be implemented to minimize the risk of nosocomial infection by containments and prevention of particulates from the construction area migrating into the high risk patient area(s).

Inspection and Air Monitoring of Asbestos Work

Visual clearance and clearance air testing shall be conducted for all Type 3 work areas.

Type 3 asbestos abatement shall be supervised by a qualified constant who shall:

- Inspect of the contaminant area prior to commencement of work to ensure it meets or exceeds the requirements under O. Reg. 278/05 prior to commencement
- Periodically monitor air inside and outside the containment area during work hours to verify the airborne fibre levels during removal procedures are under the recommended level.
- Complete final inspection of the containment area.

- Collect air samplings following forced air clearance testing. Air sample results <0.01fibers/cc are deemed acceptable.
- Conduct air monitoring to check all work is completed successfully and ensure that levels are lower than acceptable level prior to containment removal by the contractor
 - The number of air samples collected shall be in accordance with Table 3 of O. Reg. 278/05
- Provide a copy of the clearance air testing results to OHS.

Within 24 hours after the clearance air testing results are received:

- a copy of the results shall be placed in conspicuous place
- a copy shall be provide to the JOHSC

Emergency Procedures:

In the event that an employee or contractors determines that there has been unintentionally disturbance to ACM (ex. Accidental damage or uncovered during demolition/construction work), immediately notify the Project Manager, Maintenance and the OHS department and relay the location and the extent of the damage.

All activities in the area must immediately stop in order to minimise potential exposure of the individuals or other building occupants to airborne asbestos fibres.

Minor Release:

A minor release occurs when there is less than 9ft2 of ACM (or 21 linear ft. of 1.6 in.) pipe or equivalent) is disturbed.

- *Immediately notify the Project Manager and/or POM and the on-call Safety Pager (ext. 4737)*
- Following the direction of the Project Manager, Maintenance and OHS, isolate the affected area by way of physical barriers such as doors or plastic sheeting and the shutdown of the HVAC system.
- At minimum, follow Type 2 procedures to remediate the release
- The Project Manager and/or POM shall complete a Fibre Release Episode Report form Appendix 2 and submit a copy to OHS.

Major Release:

A major release occurs when greater than 9ft2 of ACM (or 21 linear ft. of 1.6 in. pipe) or equivalent is disturbed.

- *Immediately notify the Project Manager and/or POM and the on-call Safety Pager (ext. 4737)*
- Any major release episode shall require the immediate isolation of all affected areas and the involvement of a consultant and a removal contractor. At minimum, Type 2 procedures shall be followed to remediate the release.
- The consultant will design the appropriate response action and will work closely with the Project Manager, Maintenance, Infection Prevention and Control, Risk Management and OHS. Depending on the circumstances, remediate may be elevated to Type 3 status at the discretion of the Project Manager, Maintenance, OHS, Risk Management and Infection Prevention & Control.
- The Project Manager and/or POM shall complete a Fibre Release Episode Report form and submit a copy to OHS.

APPENDICES AND REFERENCES:

Related Policies

1. Infection Control during Construction, Renovation and Maintenance - IPAC-0006
2. Air Purifying Respirator Policy - HR-107

References:

- Ontario Ministry of Labour. Ontario Regulation 490/09 made under the Occupational Health and Safety Act 1990, as amended by O.Reg. 259/10; Designated Substances.
- Ontario Ministry of Labour. Ontario Regulation 278/05 made under the Occupational Health and Safety Act 1990, Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations, 2005.
- Ontario Ministry of Labour. Ontario Regulation 67/93 made under the Occupational Health and Safety Act 1990, as amended to O.Reg. 631/05; Health Care and Residential Facilities
- Ontario Ministry of Labour. Occupational Health and Safety Act and Regulations for Industrial Establishments, 1990.
- Canadian Standards Association (CSA). Z94.4-02 Selection, Use, and Care of Respirators, 2018
- Canadian Standards Association (CSA). Z317.13-12. Infection Control during Construction or Renovation of Health Care Facilities, 2012

Appendices

[Appendix 1 – Classification of Asbestos Operations and Precautions](#)

[Appendix 2 – Fibre Release Episode Report](#)

[Appendix 3 – Definitions](#)

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Mould Response Policy (IP&C and OHS)

Sunnybrook Health Sciences Centre		Policy No:	IPAC-0015
Title	Mould Response Policy (IP&C and OHS)	Original: (mm/dd/yyyy)	04/01/2005
Category	Infection Prevention & Control	Reviewed: (mm/dd/yyyy)	05/01/2007, 10/29/2010, 11/11/2013, 07/10/2017
Sub-Category	Environmental Concerns & Reprocessing	Revised: (mm/dd/yyyy)	07/10/2017
Issued By:	Infection Prevention & Control		
Approved By:	Medical Advisory Committee		

The Sunnybrook Intranet document is considered the most current.
Please ensure that you have reviewed all linked documents and other referenced materials within this page.

POLICY STATEMENT:

It is a Sunnybrook Health Sciences Centre policy to establish procedures to ensure airborne mould is minimized through safe work practice. Procedures developed will assist to identify mould sites and the source, so that an appropriate plan of action can be put in place to assure the safety of our employees, patients and volunteers is maintained. Exposures will be kept to a minimal with respect to environmental pathogens such as moulds and other fungi. These environmental pathogens, such as *Aspergillus* and *Stachybotrys* can be harmful to patients with already compromised immune systems.

DEFINITION(S):

Fungus:

Any of a major group (Fungi) of saprophytic and parasitic spore-producing organisms usually classified as plants that lack chlorophyll and include moulds (filamentous fungi), rusts, mildews, smuts, mushrooms, and yeasts.

Immune Compromised:

A reduced or lacking ability for the body to defend against pathogens (bacteria, virus, and fungi). Examples of immune compromised individuals include oncology patients, HIV/AIDS patients, dialysis patients, and patients in Intensive care units (ICU) (e.g. critical care unit, burn unit, neurosurgical ICU, Neonatal ICU, etc.).

Mould:

A growth of filamentous fungi, with a portion growing into damp or decaying organic matter and a visible surface growth, which usually assumes a fluffy appearance. Examples of filamentous fungi include *Aspergillus* and *Stachybotrys*.

PROCEDURE: If mould is suspected:

1. For an affected area greater than 10 ft², Plant Operations and Maintenance (POM) is to contact Infection Prevention & Control (IP&C) and Occupational Health & Safety (OHS) for direction and confirmation of the presence of mould.
2. If the presence of mould is confirmed, the affected area is to be hoarded off with two layers of 6 mil polyethylene sheeting. This is to prevent any further dissemination of fungal spores.

3. If the presence of mould is confirmed, and the **affected area is a ceiling tile or is less than 10 ft²**, POM may remediate the mould following *CCA 82 - 2004 Mould Guidelines for the Canadian Construction Industry* in conjunction with *CSA Z317.13-17 Infection control during construction, renovation, and maintenance of health care facilities*.
4. If the presence of mould is confirmed and the **affected area is greater than 10 ft²**, POM (or Corporate Planning) must contact an external mould remediation contractor. An environmental consultant will be involved to oversee the work at the discretion of IP&C, OHS and POM (or Corporate Planning).
5. Project Manager or Project Lead must retain records of remedial work and forward copies to IP&C and OHS.
6. A Construction, Renovation and Maintenance Permit is to be requested for all work that disturbs building materials or includes ceiling entry.

APPENDICES AND REFERENCES:

RELATED POLICIES:

[IPAC-0006 Infection Control during Construction, Renovation and Maintenance](#)

STAKEHOLDERS:

Infection Prevention and Control
Plant Operations and Maintenance
Occupational Health and Safety
Corporate Planning

REFERENCES:

1. Mould guidelines for the Canadian construction industry. Canadian Construction Association, 2004.
2. Fungal contamination in public buildings: A guide to recognition and management. Federal-Provincial Committee on Environmental and Occupational Health, Health Canada, June 1995.
3. CSA Z317.13-17, Infection control during construction, renovation, and maintenance of health care facilities, Canadian Standards Association, 2016.

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Recommended Sink Standards for New Construction and Renovation

Sunnybrook Health Sciences Centre		Policy No:	IPAC-0007
Title	Recommended Sink Standards for New Construction and Renovation	Original: (mm/dd/yyyy)	05/01/2002
Category	Infection Prevention & Control	Reviewed: (mm/dd/yyyy)	10/15/2007, 03/09/2010, 03/08/2012, 11/11/2013, 11/10/2017
Sub-Category	Construction & Renovation	Revised: (mm/dd/yyyy)	11/11/2013
Issued By:	Infection Prevention and Control Committee		
Approved By:	Medical Advisory Committee		

The Sunnybrook Intranet document is considered the most current.

Please ensure that you have reviewed all linked documents and other referenced materials within this page.

POLICY STATEMENT:

It is a Sunnybrook Health Sciences Centre policy to provide guidelines for evidence-based sink design in new construction and renovation projects to decrease and prevent the transmission of pathogens to patients, staff and visitors.

In addition to consulting all applicable regulations, codes, and standards when selecting sinks and/or related plumbing fixtures, Infection Prevention & Control (IP&C) considerations must be reviewed in order to determine the type of sink, fixture and options that may be installed in a specific location as defined below.

These recommendations do not apply to utility sinks (e.g. clean/soiled rooms).

IP&C shall be consulted for review and approval of all sink specifications and placement within the facility, as required for new construction and renovation of existing spaces.

For manufacturer fixture specifications, refer to Corporate Planning & Development's Master Specifications.

DEFINITIONS:

Hand hygiene sink:

A sink dedicated for hand hygiene (HH).

Scrub Sink:

A sink equipped to enable medical personnel to scrub their hands prior to a surgical procedure. The water supply is activated by a knee-action mixing valve or by foot control.

Utility Sink:

A sink used to clean instruments/articles, or to be used for general purposes by staff in routine unit cleaning. This sink is not to be used for hand hygiene. Frequently located in soiled rooms and/or utility rooms.

Manual Washing Sinks:

Sinks used within food premises or food preparation facilities for the manual cleaning and sanitizing of multi-service articles and utensils differing from Hand Hygiene sinks and mechanical washing (dishwashers).

Backsplash:

Impermeable material mounted behind sink area to prevent rotting and deterioration of the wall from water/chemicals splashing behind the sink causing mould and bacterial contamination.

Hand Hygiene Sink Design Specifications:

Hand hygiene sinks design shall reflect the following criteria:

1. The sink material shall be non-porous (i.e. porcelain, enamel) or 18 gauge (or thicker) stainless steel.
2. The size shall minimize recontamination from splashing during use. Minimum inside dimension should be 350 x 250mm and a minimum depth of 225mm.
3. HH sinks shall be wall-mounted, free standing and not inserted into or immediately adjacent to a counter.
 - Sinks shall be at least 1m from any fixed surface, patient care equipment, storage unit. If not possible then consult with IP&C to determine if a splash guard barrier is appropriate.
 - There must be no space between the back of the sink and the wall.
 - The sink shall be installed at least 865mm above the floor.
 - There is to be no storage/cabinet/shelving beneath the HH sink.
4. Taps and controllers must be hands free, electronic eye or foot pedal may be used.
 - Electronic eye technology shall be hard wired to the emergency power system to allow for use in times of power outage and shall have a means for users to adjust water temperature adjacent to sink.
5. HH sinks shall be shaped to prevent splashing and with a collar directing runoff into the sink basin.
 - The faucet shall not direct water directly into drain but should hit basin surface in front of the drain.
 - Faucets shall be free of aerators/modulators/rose sprays and shall not swivel.
 - Traps shall be metal and 40mm diameter, gaskets shall at skin/drain connection shall be plastic or neoprene.
 - Sink overflows shall not be used.
6. Adjacent wall surfaces shall be protected from splashes by installing an impermeable back/side splash (i.e. Acrovyn).
 - Backsplashes shall be seam free and all edges shall be sealed with a waterproof barrier.
 - Backsplashes shall extend a minimum of 600mm above sink level and 250mm below sink level.
7. Single paper towels shall be provided, no knobs or levers.
8. Liquid dispensers (lotion or soap) to be in non-refillable bottles and placed so as to prevent splash-up contamination, minimize dripping and be easily accessible when at the sink.

Hand Hygiene Sink Placement Recommendations:

A hand hygiene sink shall be placed in the following locations for all renovations/new construction:

- In each soiled utility/dirty room (in addition to hopper/slop sink/deep sink used for cleaning purposes).
- Inside each inpatient bedroom, close to the exit.
- In any space where treatment is provided or procedures or physical exams are performed, as follows:
 - i. in a location designed for one patient to be present at a time: one sink; or
 - ii. in a location designed to accommodate three or more patients at a time: a minimum of one sink for every three patients, with no more than 6 m distance between any patient station and the nearest sink;
 - iii. inside or adjacent to each diagnostic MRI room.

- In any room in which food or patient care items (e.g., tray) are prepared.
- Inside each nursing station or within 6 m of the station.
- Inside each staff lounge or within 6 m of the lounge.
- Within 6 m of each laboratory workstation and within each work room.
- In each room in which medication is prepared (including in pharmacies).
- In each area where unbagged soiled linen is handled .
- In other areas where there is potential to contaminate hands including goods receiving areas, waste storage, and disposal.

Note: The above list highlights key areas for HH sink placement and is not inclusive of all areas within the facility. For all construction/renovation the location and design of hand hygiene facilities shall be developed in consultation with infection prevention and control personnel. This will ensure an Infection Control Risk Assessment is completed for each area where a handwash sink will be place and that the following items will be addressed:

- Addition of hand hygiene sinks in new construction/renovation projects.
- Placement and design specification of the sink(s).
- Use of the sink for hand hygiene only.
- Location of waterless hand hygiene stations.

APPENDICES AND REFERENCES:

REFERENCES:

1. FGI. *Guidelines for Design and Construction of Hospital and Health Care Facilities, 2014 Edition*. The Facility Guidelines Institute, 2014 (7).
2. CSA Z8000-11, Canadian Health Care Facilities, Canadian Standards Association, 2016.

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Footwear

Sunnybrook Health Sciences Centre		Policy No:	HR-0096
Title	Footwear	Original: (mm/dd/yyyy)	06/01/2001
Category	Human Resources	Reviewed: (mm/dd/yyyy)	06/09/2022
Sub-Category	OccHealth & Safety	Revised: (mm/dd/yyyy)	12/01/2015
Issued By:	Human Resources		
Approved By:	Senior Leadership Team		

The Sunnybrook Intranet document is considered the most current.
Please ensure that you have reviewed all linked documents and other referenced materials within this page.

POLICY STATEMENT:

It is a Sunnybrook Health Sciences Centre policy to prevent foot injuries, exposures as well as injuries related to slips or trips by taking all reasonable precautions and ensuring employees wear footwear appropriate for the type of work and environment, as per the Occupational Health and Safety Act, S. 25.

This includes requirements for protective footwear as well as for recommended safe footwear, see definitions below.

DEFINITION(S):

Protective Footwear:

A boot or shoe that provides a degree of protection against injury to the wearer as defined in Canadian Standards Association, CSA, Z195-09. e.g. shoes or boots with steel toe, puncture resistant or electrical resistant soles.

Safe Footwear:

A boot or shoe that minimizes the risk of slips, trips or fall as well as foot injury. Safe footwear would have the following features:

- Closed toe and secured heel,
- non-slip sole,
- low or flat heel e.g. walking shoe

POLICY:

1. Selecting & Obtaining Footwear

- Supervisors must assess the foot and slip/trip hazards in their areas and then in consultation with the department safety committee or employees determine and communicate the department footwear based on the guidelines in Section 2.0. Occupational Health can assist with the hazard assessment if required.
- Employees are to follow the footwear standards for their department/role.
- Employees who are required by the Hospital to wear safety footwear during the course of their duties, will be directed by their manager to purchase safety footwear. The manager will administer payment for the

safety footwear in accordance with the collective agreements and administrative policies

- o Signage must be posted in areas that require protective footwear. For areas that don't require protective footwear, but have established department general footwear requirements, staff must be educated on the policy requirements and signs should be posted.

Supervisors and employees must be aware that not following recommended footwear can result in injury or fines from enforcement bodies.

2. Guidelines for Appropriate Footwear

The following guidelines from CSA Z195.1-09 are to be used in determining appropriate footwear:

Hazard	Examples of Departments	Footwear
Wet Floors e.g. water, cleaning solutions, body fluids	Environmental Services, Food Services, Patient Care Units, Operating Rooms, Labs, Patient Transport Department	Safe Footwear <ul style="list-style-type: none"> • Closed toe and secured heel, • non-slip sole, • low or flat heel recommended e.g. walking shoe • fluid resistant, • covers top of the foot
<ul style="list-style-type: none"> • Heavy Lifting >5kg • Mechanical Work • Transport Vehicles e.g. Tow Motors or Hand Trucks 	Shipping/Receiving, Stores, Tow-Motor Operators, Maintenance, Groundskeeping *	Protective Footwear (Required) <ul style="list-style-type: none"> • Steel toe • Green Patch
Possible Electrical Shock e.g. work on Electrical equipment	Facilities Services	Protective Footwear (Required) <ul style="list-style-type: none"> • Steel toe/Electrical Insulation • Green Patch/Omega W
Dropped small items e.g. glass items, minor spills	Labs, Patient Care Units	Safe Footwear <ul style="list-style-type: none"> • Closed toe and secured heel, • non-slip sole, • low or flat heel recommended e.g. walking shoe
Patient Transport	Porters, Medical Imaging, Patient Care Units	Safe Footwear <ul style="list-style-type: none"> • Closed toe and secured heel, • non-slip sole, • low or flat heel recommended e.g.

walking shoe

All Staff

****Walking** (includes walking on grounds

e.g. from car/TTC stop to building entrance

Safe Footwear

- Closed toe and secured heel,
- non-slip sole,
- low or flat heel recommended e.g. walking shoe

* If Groundskeepers are doing chainsaw work, their protective footwear must have chainsaw protection.

** All staff are reminded that Sunnybrook campus and buildings cover a large area and may require walking significant distances including stairs, ramps, hills, crosswalks, high traffic and wet areas. In addition, many staff are required to respond to emergency situations. It is recommended that all staff wear safe footwear while walking significant distances or when they will encounter any of the aforementioned conditions.

APPENDICES AND REFERENCES:**REFERENCES:**

1. Ontario Ministry of Labour. Occupational Health and Safety Act and Regulations for Industrial Establishments. 1990.
2. Canadian Standards Association. Z195.1-09, Guidelines on Selection, Care and Use of Protection Footwear. 2009.

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Data Centre and Hub Room Access Policy

Sunnybrook Health Sciences Centre		Policy No:	ICS-025
Title	Data Centre and Hub Room Access Policy	Original: (mm/dd/yyyy)	06/11/2012
Category	Information and Communication Services	Reviewed: (mm/dd/yyyy)	06/11/2012
Sub-Category	Network & Security	Revised: (mm/dd/yyyy)	10/05/2012
Issued By:	IT Operations Committee		
Approved By:	Sam Marafioti		

The Sunnybrook Intranet document is considered the most current.
Please ensure that you have reviewed all linked documents and other referenced materials within this page.

Data Centre and Hub Room Access Policy

Policy

It is Sunnybrook's policy to permit only authorized access to data centre and hub rooms in accordance with Sunnybrook Information Services security policies and procedures in order to ensure the integrity and availability of services dependent on these mission critical resources.

Definitions

Agent means any authorized Sunnybrook person accessing a data centre or hub room.

Visitor means any authorized non-Sunnybrook person seeking access to a data centre or hub room.

Purpose

This policy outlines Information Services standards for access to and maintenance of all Sunnybrook data centres and hub rooms ("facilities"). The policy is intended to enable secure access to facilities and to ensure that these facilities are maintained and operated in a safe, clean and effective manner in order to provide continuous service for dependent systems and infrastructure. All persons accessing data centres or hub rooms must abide by this policy. Failure to comply may result in loss of facility access privileges and/or removal of equipment.

Applicability

This policy applies to:

- All authorized Information Services administrators and their authorized agents who maintain equipment owned and operated by Information

Services in a data centre or hub room; and

- Any other Sunnybrook person who owns or maintains equipment housed in or accessed via any Sunnybrook data centre or hub room.
- Any Visitor for any purpose whatsoever.

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Procedures

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1 - Authorized Data Centre and Hub Room Activities

Hub rooms are intended to be single purpose rooms for accommodating Information Services network systems (network cabling and equipment), servers and storage systems and may include associated cables, monitors, power, air conditioning units, temperature monitoring units, humidity monitoring, tape drives, backup media, etc.

In addition, other Sunnybrook authorized corporate systems or infrastructure services may be housed within or accessible through a data centre or hub room, including patient monitor network systems, Medical Imaging PACS network equipment, Research network equipment, etc. Other rooms may have been built as multipurpose rooms which have other corporate systems installed such as fire alarm panels, Coax video systems, etc.

Note: installation of any non-IS owned or operated system or service in a data centre or hub room must receive prior written approval from Sunnybrook's CIO.

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2 – Administrator Responsibilities:

It is the responsibility of each Information Services system administrator to ensure that all data centres and hub rooms and all associated equipment therein are maintained and operated in a safe and effective manner, including the performance of on-going maintenance and monitoring for any unusual conditions, e.g. overheating, flooding, etc.. All non-normal operating conditions must be reported to the Manager of Information Technology at the earliest opportunity.

- All data centres and hub rooms must be kept in a safe, clean and professional manner at all times. All waste must be immediately disposed of by the respective Administrators and the waste deposited into proper containers.
- All entrances to data centres and hub rooms must kept clear as per fire/security regulations.
- All non-normal operating conditions must be reported to the Manager of Information Technology at the earliest opportunity.

- Staff failing to adhere to this policy will be reported to Director of Information Technology who will take applicable disciplinary action where required.

3 – Access

Access to a Sunnybrook data centre or hub room by any person requires

- 1) authorization from Information Services; and
- 2) either an IS escort or a personally issued KeyScan-enabled Sunnybrook ID badge.

- KeyScan-enabled access does not require an Information Services escort. Those persons accessing a data centre or hub room who have not been issued a KeyScan-enabled card must be escorted.
- Escort, where required, must be provided by either an authorized Sunnybrook Information Services or Security Services representative.
- KeyScan-enabled card access will generally be provided to authorized Sunnybrook staff (agents) and 3rd parties (visitors) requiring routine, non-escorted access on an individual, case-by-case basis.
- Individuals must only use a personally issued KeyScan-enabled card and all individuals must either scan in or be escorted to enter a room (all tailgating is strictly prohibited).
- Access (whether by escort or KeyScan) will be logged and routinely audited by information Services.

Sunnybrook Information Services Purposes

Sunnybrook agents (IS and non-IS departmental server admins) requiring temporary or permanent access to data centres and hub rooms must send a request to the IS Network team and receive written authorization prior to access.

Temporary access to these rooms will be granted on a short-term basis for 3rd party vendors or other visitors performing work on behalf of Information Services (e.g. for software or hardware installation or maintenance).

Sunnybrook Non-Information Services Purposes

Access to data centres and hub rooms for non-IS purposes must be authorized by the Director of Information Technology or designate. Temporary access to these rooms will be granted on a short-term basis for 3rd party vendors (visitors) requiring access to service or install non-IS systems in the room (e.g. renovations to the room, service or installation of air conditioning, etc.), including but not limited to:

- Installation or service of any non-IS systems such as Patient Monitor, PACS or Research, fire alarm panels, security system panels, electrical service panels, coax TV systems, etc.
- For construction work near or in these rooms requiring access, including installation of conduit or cables that will pass through the rooms; etc.

- Access by other non-IS Sunnybrook project managers, maintenance and service personnel or their agents (e.g. for Facilities Planning or Maintenance personnel, vendors or contractors) who may require access to these rooms to implement projects, install systems or maintain and service essential systems such as on an ongoing basis or in emergencies.

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4 - Security:

Authorized Access Only

Access to data centres and hub rooms is absolutely restricted to authorized individuals as documented in this policy and as identified by the Manager, Information Technology in the IS Network Team Data Centre and Hub Room Access access control list.

- All data centres and hub rooms must be kept locked at all times.
- Access to data centres and hub rooms will be logged and audited by the Manager, Information technology
- All persons requesting access will be required to supply identifying information (name, company name or department, room number and phone number/local) and the purpose for entry before being granted access.
- Access is permitted for those activities required for the indicated purpose and under no circumstances shall other activities occur for any other purpose without written approval of the Manager, Information Technology.
- Security badges must be worn at all times.

Visitors

- All Visitors must be escorted at all times by an authorized SB Information Services staff or member of Sunnybrook's Security staff unless they have been issued a KeyScan-enabled Sunnybrook ID badge (see Appendix 1).
- Authorized Visitors who may require continuous access for greater than 5 days may be provided with a temporary Visitors' badge enabling KeyScan access at their cost or at the cost of their sponsor at the discretion of the Manager, Information Technology.
- Visitors are not permitted to have possession of any data centre or hub room access lock key other than an authorized KeyScan-enabled Sunnybrook ID badge which has been assigned to them personally.

Enforcement:

- Any person found to have violated this policy may be subject to disciplinary action, up to and including termination of employment and/or legal action at the sole discretion of Sunnybrook Health Sciences Centre.

Contact Information:

George Lee	x4219	page 7308
David Chong	x7232	page 8101
Myles Leicester	x4377	page 8137
Wilfred Yan	x85322	page 5416

IS Help Desk x4159
Fire and Security x4589

Appendix 1

Requesting Access to ICN Data Centres and Hub Rooms

The following procedures must be used for requesting access to any Sunnybrook data centres or hub room.

Requesting access during business hours:

- 1) Users requiring access to data centres or hub rooms must email the IS Network team for access. The IS Helpdesk can also be called and will, in turn, email and page the ICN Network team. Users are to identify themselves and indicate the reason they require access to this room as well as date and time required.
- 2) The IS Network team will review the request and access may require further management approval without prior notice.
- 3) The IS Network team may personally provide access to the room or submit a request to Sunnybrook Security Services to authorize access.
- 4) The IS Network team will log all access, including identity of user, data centre or hub room number, date, start and stop times and reason for access.

Requesting access after business hours:

- 1) Users requiring access to hub room must call the Security office (ext. 4589) to request access. Users must identify themselves and indicate the reason they require access.
- 2) Security will only provide access to persons appearing on a list of pre-approved personnel provided by the IS Network team or based on prior written permission of a member of the IS network Team or the manager, Information Technology.
 - a) If a person is authorized for entry, Security will open the door to permit user access to the room.
 - b) If user is not authorized for entry then Security will deny access and advise the user to contact IS the following day.
 - i) If the user cannot wait then Security may contact the IS Helpdesk for assistance in contacting an authorized IS representative.
 - ii) If Security contacts the IS Helpdesk, the Helpdesk personnel will assess the request and, if necessary, email and page the ICN Network Team for directions.
- 5) Security will log all access, including the identity of user, data centre or hub room number, date, start and stop times and purpose for access.

Requesting KeyScan Access

Note: Some rooms are equipped with KeyScan access. Visitors may be assigned KeyScan-enabled Sunnybrook ID badge as noted above, however only escorted Visitor access can be granted to rooms without KeyScan pads.

The following procedure is used for requesting KeyScan access to data centres:

1. User submits request by email to IS Helpdesk or IS Network team. Name, department, phone number and pager number of person(s) requiring access, data centre(s) to be accessed and reason for access must be provided. Pre-approved requests may be provided by IS management on behalf of the user.
2. All requests will be forwarded to IS Network team. If the request is questionable then it will be forwarded to IS management for approval. (e.g. to install non-IS systems or allow departmental servers to be installed in the ICN data centres).
3. If a request is approved and accepted then the IS Network team will forward an e-mail to Security to authorize access via KeyScan.

Note: Security will not accept requests directly from users and will only accept requests from the IS Network team.

If short term temporary access is requested then the IS Network team will specify the number of days for which access has been granted.

4. Security will create a KeyScan-enabled Sunnybrook ID badge for the approved access and confirm back to ICN Network team and/or directly to the user(s) requiring access. Vendors requiring a temporary ID badge can pick it by visiting the Security office (CG03) only after providing proper identification. Prior email notification of access approval must be received by Security from the IS Network team.

No person may use a KeyScan-enabled Sunnybrook ID badge which has not been assigned to them personally to access a data centre or hub room.

5. If temporary access was issued, at the completion of the access period, IS Network team will issue a follow-up email to Security to remove access.
6. If IS Network team is informed of a user leaving the hospital who no longer requires access to a room, IS will issue an email to Security to remove any KeyScan access which may have been previously assigned to that individual.
7. The IS Network team will maintain a spreadsheet of users that have been granted KeyScan access. Date of request and room accesses granted as

Sunnybrook Contractor Safety Form

By signing below, the Contractor representative certifies that the Contract Company has received copies of all Policies and Procedures required for safe practice while providing a service to Sunnybrook Health Sciences Centre (SHSC). The Contractor further agrees to communicate the required information embedded in these policies and procedures to all of its workers.

It is expected that the Contractor;

- Will maintain a safe workplace and work in accordance with safe work practices and house keeping
- The Contractor shall comply and cause all of its subcontractors to comply with all applicable provisions, requirements and safety standards of the Ontario Occupational Health and Safety Act and its regulations and all SHSC Safety Policies and Procedures. The Contractor will also be able and willing at such times as recommended by SCHC to provide additional precautions as deemed necessary by SHSC for safe-guarding employees and equipment. The Contractor further acknowledges and agrees that any violation of safety rules or regulations is justification for the immediate termination of its Contract with SCHC, without any further obligation on the part of SHSC.
- Comply with the sign in procedure and applicable SHSC policies and procedures.

We have read and understand the above information

Contractor (Signature)

Name (Please Print)

Date

SHSC Project Manager (Name)

Contact Number

Date

WSIB Clearance Certificate Provided

☐

Certificate of Liability Insurance Provided

☐

Contractor Safety Checklist

Description of Work:					
Area(s) to be Affected:					
Approximate Duration (include dates):					
Contractors Name and Contact Number:					
Project Managers Signature:				Date:	
		YES	NO	NA	Comments
1.0	ID Badges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.0	Sign-in procedure and location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.0	All applicable policies and procedures have been provided to contractor staff working at SHSC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.1	<i>Emergency Codes (Quick Guide)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2	<i>Copy Respect Program (Corporate Code of Conduct) provided</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.3	<i>Asbestos Management</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.4	<i>Mould Response/Management</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.5	<i>Restricted and Confined Space</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.6	<i>Infection Control during Construction, Renovation and Maintenance</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

		YES	NO	NA	Comments
4.0	<i>Smoke-Free Environment</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.0	Fire alarm bypass required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.0	Aware of incident/accident reporting procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.0	Contractor aware of required permits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.1	<i>Construction Renovation and Maintenance Permit</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.2	<i>Hot Work Permit</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.3	<i>Restricted and Confined Space Permit</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8.0	Record of training required? (i.e. Type 3 work as per O.Reg. 278/05)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9.0	MRI/Radiation Safety required (working in AG, SG, TB, M3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10	Contractor has been made aware of all Designated Substances and other hazards within work area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Contractor (Signature)

Name (Please Print)

Date

SHSC Project Manager (Name)

Contact Number

Date

Fire Watch Procedure

Fire Alarm Outages Sunnybrook Health Sciences Centre

A fire watch is required should the sprinkler system or fire alarm system or components of either system be on bypass, disconnected, or fail to work as designed and not provide continuous facility-wide protection. Components of fire alarm system could include but is not limited to: the fire alarm panel, smoke or heat detection system, and the fire alarm notification system. A designated person, trained in containment and extinguishment shall implement a fire watch of the total impacted area of the facility.

DOCUMENTATION: Every fire watch tour needs to be documented with the findings which will include the date, time and staff initials of person(s) performing the watch. A fire watch tour is a continuous activity performed by having one or more assigned/trained staff walking the entire affected area of the system outage. The tour monitors the facility through direct observation for possible signs of fire.

OCCURENCES: Sprinkler and fire alarm system outages can occur during construction, renovations or other planned or unplanned events which eliminate part or the entire sprinkler or fire alarm system's functioning ability.

WHAT TO DO:

1. Contact security when any bypasses are required or a problem is encountered with the sprinkler or fire alarm system.
2. Security will contact Toronto Fire and the fire alarm company to be made aware of the impairment to the impacted system
3. The fire watch procedure shall designate the wing, floor or building identifier during the facility tour.
4. Location of the facility's fire extinguishers shall be known in the impacted building and additional extinguisher(s) shall be supplied and kept in a known location by the contractor during construction and renovation.
5. Fire watch tours shall occur continuously. Typically at 1 hour intervals 24 hours a day for as long as the system is impacted.
6. A fire watch should check and document the following in all rooms including:
 - Patient/Resident rooms
 - Offices
 - Mechanical and Electrical rooms
 - Construction or renovation work areas shall be monitored continuously

7. Observation of fire or smoke during this fire watch should immediately initiate the facility's fire safety plan. Remove anyone requiring assistance, Alert other's by shouting, calling 5555 from a house phone or 416 480 5555 from a cell phone and pulling a fire alarm pull station(pull station may be disabled depending the nature of the impairment). Contain the fire by closing doors and prepare to evacuate.

8. Maintenance staff shall be available on site or on call for equipment emergency shut down situations.

Sunnybrook Fire Watch Log

Date	Area impacted
System impacted	Expected duration of fire watch
Contact/Person conducting fire watch	Business name
Phone number	Address
City	Postal code

Fire watch patrol is to be performed at 1 hour intervals until the impaired fire system is restored. Document each fire watch patrol on the log sheet below. In addition document any significant related events in more detail in the "Additional Comments" section. Make additional copies of this form as needed.

[illegible]

**REVISED LIMITED DESIGNATED SUBSTANCE
SURVEY REPORT
(K2E & K3E Renovations)**

**Sunnybrook Health Sciences Center
2075 Bayview Avenue
Toronto, Ontario**

Presented to:

Sunnybrook Health Sciences Center
2075 Bayview Avenue
Toronto, Ontario
M4N 3M5

Attention: Kian Zehtabchi

July 16, 2025

Maple Project No. 22765

EXECUTIVE SUMMARY

Maple Environmental Inc. ('Maple') was retained by Sunnybrook Health Sciences Center (SHSC) to perform a survey for Designated Substances as well as polychlorinated biphenyls (PCBs) and mould within the selected areas of the K-Wing of Sunnybrook Hospital located at 2075 Bayview Avenue, Toronto, Ontario (the 'Site'). It is our understanding that a survey is required to be conducted to identify any possible hazardous building materials that may be disturbed during the proposed renovations specified for the K2E & K3E Renovations Project.

The survey was limited to sections of the Second & Third Floors of the K-Wing East Section associated with K2E & K3E Renovations Project as identified on the drawings prepared by NORR Architects & Engineers Ltd. The findings of the current survey are summarized below. Please refer to the main body of this report for details on all materials.

Asbestos

Asbestos-containing materials (ACM's) identified within the surveyed area at the time of the assessment are as follows:

- Vinyl Sheet Flooring

It should be noted that due to the presence of solid walls and ceilings in the surveyed areas, access for viewing within the wall and ceiling cavities was not always possible. Suspect asbestos-containing materials may be present within wall and ceiling cavities that were not identified but are suspected to be present in this report. Caution should be taken when demolishing solid walls and ceilings within the areas being surveyed.

Lead

Based on the findings, the following general conclusions are made:

- Representative bulk sampling of the predominant paint colours indicated the presence of "Low-Level Lead" paints finishes (i.e. "virtually safe") in the areas surveyed.
- It should be noted that lead may also be present in wiring connectors, electric cable sheathing, solder joints on copper piping, ceramic glazes, emergency light batteries, lead sheeting, and as sub-surface layers to the most recent paint layers currently applied, where present at the Site.

Mercury

- Mercury vapour is present in all fluorescent light tubes.

Silica

- Free crystalline silica, present as common construction sand, is present in all concrete and masonry products where present within the surveyed areas.

Mould

- Visible water-stained acoustic ceiling tiles were observed in several location of the proposed Work Area.
- It is possible that mould growth is present in concealed areas such as wall or ceiling cavities, pipe chases, etc. or in areas not currently assessed by Maple. The client should notify Maple should any water damage or suspect mould growth be discovered.

Polychlorinated Biphenyls (PCBs)

- The fluorescent lamp fixtures observed contained T8 fluorescent light tubes. T8 fixtures have electronic ballast and are considered as not containing PCB.
- All transformers observed on site were new and not suspected to contain PCBs.

Recommendations

Based on the Laboratory Analytical Results and observations made on Site, Maple provides the following recommendations:

- Remove all asbestos-containing materials that may be disturbed during the planned renovation using the appropriate asbestos abatement procedures as outlined in Section 5.0 of the Report.
- "Low-Level Lead" paint finishes (0.1% or less) are considered to be virtually safe provided that:
 - Airborne lead concentrations are kept below 0.05 mg/m³;
 - general dust suppression and worker hygiene procedures are utilized; and
 - torching or other activities that create fumes are not completed.
- Recycle and reclaim mercury from fluorescent light tubes when taken out of service. Do not break lamps or separate liquid mercury from components. Liquid mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.
- Remove and dispose of the water-stained ceiling tiles using EACC Level 1 Mould Remediation Procedures.
- If previously unidentified mould growth is found within the wall cavities of the walls to be removed, Maple is to be contacted to assess the conditions and provide appropriate mould remediation procedures.
- Proper dust suppression techniques and other safety precautions to control possible generation of silica dust from the demolition of concrete and masonry products present in the surveyed area should follow those outlined in the Ministry of Labour Guideline- Silica on Construction Projects, 2004.

Appropriate procedures for asbestos, lead, mercury, silica and mould must be utilized if these materials are likely to be disturbed by scheduled renovations. Please refer to Section 5.0 of the report to review the required procedures.

Consideration should be given to assessing other areas of the building that could be associated with the current project, including travel path, mechanical or electrical ties in the areas outside of the immediate project area, and penetrations through the slab impacting floors below or above.

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APPENDIX I

LABORATORY ANALYSIS REPORT - ASBESTOS

APPENDIX II

LABORATORY ANALYSIS REPORT - LEAD

APPENDIX III

DRAWINGS

1.0 INTRODUCTION

Maple Environmental Inc. ('Maple') was retained by Sunnybrook Health Sciences Center (SHSC) to perform a survey for Designated Substances as well as polychlorinated biphenyls (PCBs) and mould within the selected areas of the K-Wing of Sunnybrook Hospital located at 2075 Bayview Avenue, Toronto, Ontario (the 'Site'). It is our understanding that a survey is required to be conducted to identify any possible hazardous building materials that may be disturbed during the proposed renovations specified for the K2E & K3E Renovations Project.

The survey was limited to sections of the Second and Third Floors of the K-Wing East Section associated with K2E & K3E Renovations Project as identified on the drawings prepared by NORR Architects & Engineers Ltd. The findings of the current survey are summarized below. Please refer to the main body of this report for details on all materials.

Section 30 of the Ontario Occupational Health and Safety Act requires that the following Designated Substances be included in a Designated Substance Survey:

Asbestos

Lead

Mercury

Silica

Isocyanates

Vinyl Chloride Monomer

Benzene

Acrylonitrile

Coke Oven Emissions

Arsenic

Ethylene Oxide

Additional detailed information with respect to asbestos was collected at the time of the survey to ensure compliance with Ontario Regulation 278/05.

The assessment was performed by Richards Rebocks of Maple on June 19, 2025.

2.0 APPLICABLE ONTARIO REGULATIONS

Applicable Ontario Regulations for each of the materials included in the investigation are briefly described below.

2.1 Designated Substances and Other Hazardous Materials

Section 30 of the Occupational Health and Safety Act requires building owners or their agents (architects, general contractors, etc.) to prepare or have prepared a Designated Substance report for specified potentially hazardous materials possibly present in a facility. The owner must ensure that a prospective constructor has received a Designated Substance report before entering into a binding contract with the contractor. The owner is liable to the contractor for damages and costs arising from unreported materials (of which the owner should reasonably have been aware), and could also be subject to orders and fines from the Ministry of Labour.

In addition to the requirements under the Occupational Health and Safety Act, Section 6 of the Ministry of Labour Regulations for Construction Projects requires the contractor, when submitting the Notice of Project form, report any Designated Substances likely to be used, handled or disturbed during the project.

The disturbance of asbestos materials on construction projects is controlled by Ministry of Labour Regulation R.R.O. 2005/278. The disposal of asbestos waste is controlled by Ministry of Environment Regulation, R.R.O. 1990/347.

There are no specific Ministry of Labour regulations for control of the other Designated Substances on construction projects. However, the Ministry of Labour actively enforces the general duty clause of the Health and Safety Act which protects workers and provides guidance on exposure monitoring, permissible exposure levels, medical monitoring, etc. for all Designated Substances.

Although Regulations exist for many of the Designated Substances, they apply to industry settings using Designated Substances in manufacturing processes, and do not apply to general property management, renovation or maintenance of buildings.

Polychlorinated Biphenyls ("PCBs") and mould were also included in the investigation, which are not specifically named as Designated Substances. No specific regulations are attached to these materials, but are generally governed by the due diligence section of the Health and Safety Act for employers to protect their workers.

2.2 Ontario Regulation 278/05 (Asbestos)

Ontario Regulation 278/05 applies to buildings with regards to maintenance, renovations or demolition work where asbestos-containing materials (ACM) is present and may be disturbed. The Regulation requires that a detailed asbestos inventory be performed in all buildings where friable and non-friable asbestos materials are present. The inventory must be available at the work place and must identify the type of asbestos, and location of asbestos on a room-by-room basis. The following report does not necessarily meet the requirements for an asbestos survey under Ontario Regulation 278/05.

2.3 Ontario Regulation 347

Ontario Regulation 347 applies to the transport of waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

The major requirements of the building owner and the person(s) removing the waste are to ensure that:

- The waste is appropriately packaged and labelled;
- The transport vehicle is appropriately placard; and
- The waste is to be transported as directly as possible to the landfill site once it leaves the site.

Some wastes require the owner to register a Generator (of waste) number and many wastes require classification that can restrict or even prohibit their disposal in landfill.

It is important to note that the building owner can be held responsible for the waste until the waste disposal site accepts it.

2.4 Ontario Regulation 362

Ontario Regulation 362, made under the Ontario Environmental Protection Act applies to the waste management and transport of PCB waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

3.0 SURVEY SCOPE AND METHODOLOGY

The survey was limited to sections of the K2E & K3E Floors as identified on the drawings prepared by NORR Architects & Engineers Ltd.

In order to determine the location of materials included in the assessment, the project technologist entered each room where practical (i.e. where access was possible without the demolition of walls, roof or ceilings or destruction of flooring). Representative views were made above accessible suspended ceiling systems. Cavities within solid ceiling and wall systems were accessed via existing access panels only. The inventory did not include demolition of building systems or finishes to check on possible hidden conditions.

3.1 Asbestos-Containing Building Materials (ACM)

The scope of the survey included all friable asbestos products and all major non-friable asbestos materials. The term friable is applied to a material that can be readily reduced to dust or powder by hand or moderate pressure. Asbestos materials that are friable have a much greater potential to release airborne asbestos fibres when disturbed.

Typical friable asbestos materials include: sprayed fireproofing or thermal insulation, textured (stippled) plaster, and thermal mechanical insulation. Typical non-friable materials include: asbestos cement (transite) products, vinyl floor tiles, asbestos textiles and gaskets. Additional materials such as ceiling tiles, drywall joint compounds and vinyl sheet flooring are classified as non-friable, but because of their ability to release dust when disturbed are considered as "potentially friable" for the purpose of this report.

Bulk samples of materials suspected to contain asbestos were collected for analysis during the survey. Specifically, a small volume of material was removed either from a damaged section of suspect material, or taken from intact material. In these latter cases, the material from which the sample was collected was sealed with tape to temporarily prevent fibre release. Samples were placed in plastic bags and sealed until receipt by an independent laboratory. To ensure quality results, the independent laboratory chosen successfully participates in an "Asbestos Proficiency Analytical Testing Program". As such, these independent laboratories are responsible for their findings.

Bulk samples were collected in accordance with regulatory sampling requirements and with sufficient frequency to obtain a general pattern of asbestos use within the building. Due to building renovations or modifications that may have occurred in the past, the consistency of the application of asbestos materials may not be uniform throughout the entire Site.

It is important to note that without sampling each individual wall, pipe section, ceiling tile etc. it is not possible to identify the asbestos content of every material present in the selected areas. For this reason, visually similar materials are considered to be homogenous with those already sampled elsewhere in the building without additional analysis.

O. Reg. 278/05 prescribes that a minimum number of samples be collected of materials suspected to contain asbestos. These minimum sampling requirements are summarized in Table 1, below.

Table 1- Suspect ACM Bulk Sampling Requirements		
Type of Material	Quantity of Material Present	Minimum # of Bulk Samples Required
Surfacing Materials (i.e. sprayed fireproofing, drywall joint compound, texture coat, and plaster)	Up to 90 sq/m (1000 sq/ft)	3
	From 90 sq/m (1000 sq/ft) to 450 sq/m (5000 sq/ft)	5
	Greater than 450 sq/m (5000 sq/ft)	7
All other potential ACM	Any	3

Excluding surfacing materials, the laboratory was instructed to cease analysis within Sample Groups of homogenous materials when one of the samples in the group is found to contain asbestos. For example, if three samples of a type of vinyl floor tile are collected (as required by O. Reg. 278/05) and submitted for analysis and the first sample is positively identified as containing asbestos, the balance of the sample group is not analysed.

EMC Scientific ("EMC"), an independent laboratory, was selected to analyse the collected bulk suspect asbestos samples. EMC successfully participates in an "Asbestos Proficiency Analytical Testing Program" and as such, is responsible for its findings. EMC followed the Code of Practice for the identification of asbestos in bulk material, as detailed in O. Reg. 278/05. Bulk samples were analysed using the Polarized Light Microscopy ("PLM") Technique with Dispersion Staining. The identification of asbestos fibre in bulk material is based on a collective set of parameters dependent on the unique shape and crystallographic properties of each fibre as viewed through the microscope. This method is useful for the qualitative identification of asbestos and the semi-quantitative determination of asbestos content in bulk materials expressed as a percent of projected area. The method identifies types of asbestos and also measures percent of asbestos as perceived by the analyst in comparison to standard area projections or trained experience.

The recommendations made as part of this report with respect to asbestos have taken into consideration: the condition and accessibility of the material, vibration, air movement, and general activities likely to occur within the vicinity of the ACM.

In each area or room inventoried, the technician recorded the quantity, condition (GOOD, FAIR, or POOR) of each suspect asbestos-containing material.

The definitions for condition and accessibility of the asbestos-containing items are as follows:

GOOD	Material is intact with no visible signs of damage.
FAIR	Material is visibly damaged but can be repaired.
POOR	Material is damaged beyond repair and likely needs to be removed.

Where ACM is found to be in GOOD condition and not likely to deteriorate or fall, the general recommendation would be to re-evaluate the condition of the material on an annual basis (required by O. Reg. 278/05). This recommendation can be subject to change if the material is located in a manner that persons untrained in asbestos awareness could physically damage it.

Where ACM is found to be damaged (i.e. FAIR or POOR condition), a recommendation to have the material cleaned-up, repaired, removed, enclosed, or encapsulated is offered. The recommendation will also indicate which asbestos procedure should be used to perform the remedial work (i.e. Type 1, Type 2, Type 3, or Glove Bag Removal Methods).

3.2 Lead

The investigation included the collection and analysis of all major paint colour applications for the presence of lead in the paint. Other materials that possibly contain lead were identified by known historic use, where relevant. The lead samples were analysed by EMSL Canada ("EMSL"), using atomic absorption spectrophotometry. EMSL is AIHA (American Industrial Hygiene Association) and NIOSH (National Institute of Occupational Safety and Health) accredited for this type of analysis. The Laboratory Analysis Report for lead in paint samples is included with this Report as Appendix II.

3.3 Mercury

The assessment included a visual identification of fluorescent light tubes, switches, electrical controls, heating system thermostats, thermometers, and other components historically known to contain mercury.

3.4 Other Designated Substances

Other materials listed in Section 1.0 of this Report were identified on a visual basis where present, as part of the current assessment. It should be noted that no manufacturing or heavy industrial activities are known by Maple to occur at the Site. Therefore, Designated Substances associated with these activities (i.e. those other than Asbestos, Lead, Mercury, and Silica) would not be expected to be present in the selected areas.

3.5 Mould

The assessment for mould was conducted in accordance with standard industry practice as set out in the Canadian Construction Association (CCA) "Mould Guidelines for the Canadian Construction Industry" for a visual assessment. Although there are no regulatory requirements in Ontario for such an assessment, the CCA Guidelines, and similar guidelines from other agencies have been accepted as the industry standard by most experts, consultants, the Ontario Ministry of Labour, and the Canadian Construction Association.

All guidelines and protocols for mould investigations indicate that investigations should be performed largely on a visual basis with limited collection of bulk and/or air samples. The Ontario Ministry of Labour has consistently enforced the removal of all mould from buildings regardless of mould genus or species, and therefore bulk samples or air samples for confirmation of mould are not typically collected for investigative purposes where mould is visible.

3.6 Polychlorinated Biphenyls

Manufacturers labels/codes collected from fluorescent lamp ballasts suspected of containing Polychlorinated Biphenyls ("PCBs") are compared with Environment Canada's document titled "Identification of Lamp Ballasts Containing PCBs", which identifies PCB-containing ballasts.

3.7 Limitations and Omissions from Scope

Due to the nature of building construction some limitations exist as to the possible thoroughness of any building materials inventory. The field observations, measurements, and analysis are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. Maple warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the inventory.

It is possible that conditions may exist which could not be reasonably identified within the scope of the inventory or which were not apparent during the Site investigation. Maple believes that the information collected during the investigation concerning the property is reliable. No other warranties are implied or expressed.

During a standard ACM inventory performed for the purposes of regulatory compliance, it is industry practice to exclude certain suspect asbestos-containing materials from sampling. These materials are often excluded from sampling due to the risk of compromising the health and safety of the technician, other building occupants, or the integrity of the systems with which these materials are associated. Examples of such materials include; elevator brakes, roofing felts and mastics, high voltage wiring, mechanical packing and gaskets, underground services or piping, fire-doors, window caulking and levelling compound. Where observed, these materials were presumed to be ACM.

3.8 Drawings

Drawings included in Appendix III will indicate the locations of any major applications of an asbestos-containing material with the exception of mechanical insulations, drywall, plaster finishes and transite (which cannot be accurately depicted on drawings). The information depicted on the drawings is not to scale and is only meant to provide a general representation of the locations of asbestos-containing materials.

4.0 INVENTORY FINDINGS

The findings of the survey are presented separately below for each of the eleven Designated Substances as well as microbial growth (mould), and polychlorinated biphenyls. Asbestos is further detailed by typical applications of asbestos.

4.1 Asbestos

The following is a brief discussion of the extent to which ACM was identified in the surveyed area. The discussion is organized under the headings of materials that are generally suspected of containing asbestos. The sample numbers refer to the laboratory analysis report presented as Appendix I and summarised in Table 2 below.

Thirty-four (34) bulk samples were collected for the determination of asbestos content and submitted to the lab to be analysed. Due to the presence of more than one phase of material in some of the original samples the laboratory may have performed multiple analyses for some samples. As a result, a total of fifty-five (55) samples were analyzed.

Table 2- Analysis Summary of Asbestos Bulk Samples			
Sample No.	Room Name	Sample Description	Result
S01A	K2E02	White Plaster Layer of Wall	None Detected
		Grey Plaster Layer	None Detected
S01B	K2E08	White Plaster Layer of Wall	None Detected
		Grey Plaster Layer	None Detected
S01C	K2E14	White Plaster Layer of Wall	None Detected
		Grey Plaster Layer	None Detected
S01D	K2E25	White Plaster Layer of Wall	None Detected
		Grey Plaster Layer	None Detected
S01E	K2E31	White Plaster Layer of Wall	None Detected
		Grey Plaster Layer	None Detected
S01F	Corridor	White Plaster Layer of Wall	None Detected
		Grey Plaster Layer	None Detected
S01G	K3E02	White Plaster Layer of Wall	None Detected
		Grey Plaster Layer	None Detected
S02A	K2E02	Grey Rough Wall Plaster above Ceiling	None Detected
S02B	K2E08	Grey Rough Wall Plaster above Ceiling	None Detected
S02C	K2E14	Grey Rough Wall Plaster above Ceiling	None Detected
S02D	K2E25	Grey Rough Wall Plaster above Ceiling	None Detected
S02E	K2E31	Grey Rough Wall Plaster above Ceiling	None Detected
S03A	K2E02	VSF01 – Grey Sheet Flooring, White and Grey Flecks	None Detected
		Yellow Mastic	None Detected
S03B	K2E12	VSF01 – Grey Sheet Flooring, White and Grey Flecks	None Detected
		Yellow Mastic	None Detected

Table 2- Analysis Summary of Asbestos Bulk Samples			
Sample No.	Room Name	Sample Description	Result
S03C	K2E25	VSF01 – Grey Sheet Flooring, White and Grey Flecks	None Detected
		Yellow Mastic	None Detected
S04A	K2E02	White Drywall Joint Compound from Ceiling	None Detected
S04B	K2E08	White Drywall Joint Compound from Ceiling	None Detected
S04C	K2E14	White Drywall Joint Compound from Ceiling	None Detected
S04D	K2E25	White Drywall Joint Compound from Ceiling	None Detected
S04E	K2E31	White Drywall Joint Compound from Ceiling	None Detected
S04F	K2E Cor	White Drywall Joint Compound from Ceiling	None Detected
S04G	K3E Cor	White Drywall Joint Compound from Ceiling	None Detected
S05A	K2E05	VSF02 – Tan Flooring with White Square Pattern	None Detected
		Grey Vinyl Backing	60% Chrysotile
S05B	Corridor	Sample Not Analyzed	Not Analyzed
S05C	Corridor	Sample Not Analyzed	Not Analyzed
S06A	K2E09	VFT01 - Beige 12" x 12" Floor Tile	None Detected
		Colourless Mastic	None Detected
		Grey Cementitious Material	None Detected
S06B	K2E09	VFT01 - Beige 12" x 12" Floor Tile	None Detected
		Colourless Mastic	None Detected
		Grey Cementitious Material	None Detected
S06C	K2E09	VFT01 - Beige 12" x 12" Floor Tile	None Detected
		Colourless Mastic	None Detected
		Grey Cementitious Material	None Detected
S07A	K2E09	VFT02 - Rose 12" x 12" Floor Tile	None Detected
		Yellow Mastic	None Detected
S07B	K2E09	VFT02 - Rose 12" x 12" Floor Tile	None Detected
		Yellow Mastic	None Detected
S07C	K2E09	VFT02 - Rose 12" x 12" Floor Tile	None Detected
		Yellow Mastic	None Detected

Table 2- Analysis Summary of Asbestos Bulk Samples			
Sample No.	Room Name	Sample Description	Result
S08A	K3E02A	VSF03 – Orange Vinyl Sheet Flooring	None Detected
		Black Mastic	None Detected
S08B	K3E02A	VSF03 – Orange Vinyl Sheet Flooring	None Detected
		Black Mastic	None Detected
S08C	K3E02A	VSF03 – Orange Vinyl Sheet Flooring	None Detected
		Black Mastic	None Detected

Asbestos-containing materials (ACM's) identified within the surveyed area at the time of the assessment are as follows:

- Vinyl Sheet Flooring

Details for suspect asbestos-containing materials are presented below under the headings of the most typical asbestos applications in buildings.

It should be noted that due to the presence of solid walls and ceilings in the surveyed areas, access for viewing within the wall and ceiling cavities was not always possible. Suspect asbestos-containing materials may be present within wall and ceiling cavities that were not identified but are suspected to be present in this report. Caution should be taken when demolishing solid walls and ceilings within the areas being surveyed.

4.1.1 Sprayed Fireproofing (Friable)

No sprayed fireproofing was identified within the surveyed area at the time of the assessment.

4.1.2 Thermal Mechanical Insulation (Friable)

No asbestos-containing mechanical insulations were identified in the the surveyed area.

Piping Systems:

Pipe systems observed within the surveyed area were either not insulated or were insulated with fibreglass, which is not suspected to contain asbestos.

All pipe straights observed were either insulated with non-asbestos fibreglass and PVC or were un-insulated.

Duct Systems:

Duct systems observed throughout the surveyed area were observed to be either un-insulated or were insulated with foil-face fibreglass insulation which is not suspected to contain asbestos.

Mechanical Equipment:

No mechanical equipment was identified in the areas surveyed.

4.1.3 Texture Finish (Friable)

No textured finishes were identified within the surveyed area at the time of the assessment.

4.1.4 Acoustic Ceiling Tiles (Potentially Friable)

No asbestos-containing acoustic ceiling tile systems were identified within the surveyed area at the time of the assessment.

One (1) visually distinct type of ceiling tile system was observed in the surveyed area. A brief description of the ceiling tile present is outlined below:

- AT-01 (2' x 4' Textured with Pinholes):

AT-01 was observed to be present in throughout the Work Area.

No bulk samples of AT-01 were collected as a manufacture's date stamp code (08/09/08) was present on the backside of the tile indicating that the tiles were recently manufactured and therefore not suspected to contain asbestos.

4.1.5 Vinyl Sheet Flooring (Potentially Friable)

Asbestos and non-asbestos vinyl sheet flooring finishes were identified within the surveyed area at the time of the assessment.

Three (3) visually distinct types of vinyl sheet flooring finishes were observed in the surveyed area. A brief description of each of the flooring is outlined below:

- VSF01 (Grey Vinyl Sheet Flooring):

VSF01 was observed to be present in the Patient Washrooms.

Three (3) representative samples (Sample Set S03A-C) of the grey vinyl sheet flooring were collected and analyzed for determination of asbestos content. Analysis of Sample Set S03 found the sheet flooring material does not contain asbestos.

The yellow mastic material associated with the vinyl sheet flooring samples was also found not to contain asbestos.

- **VSF02 (Brown Vinyl Sheet Flooring with White Square Pattern):**

VSF02 was observed to be present in the Patient Rooms and Corridors.

Three (3) representative samples (Sample Set S06A-C) of the brown vinyl sheet flooring were collected and analyzed for determination of asbestos content. Analysis of Sample Set S06A found the sheet flooring backing material contains **50% Chrysotile asbestos**. As the material was found to contain asbestos in Sample Set S06A, the remaining samples in the homogenous sample set were not analyzed due to the Stop Positive Analytical Methodology used.

The sheet flooring was observed to be in GOOD condition.

- VSF03 (Orange Vinyl Sheet Flooring):

VSF03 was observed to be present in the Patient Washrooms.

Three (3) representative samples (Sample Set S08A-C) of the orange vinyl sheet flooring were collected and analyzed for determination of asbestos content. Analysis of Sample Set S08 found the sheet flooring material does not contain asbestos.

The black mastic material associated with the vinyl sheet flooring samples was also found not to contain asbestos.

4.1.6 Vinyl Floor Tile (Non-Friable)

No asbestos-containing vinyl floor tiles were identified within the surveyed area at the time of the assessment.

Two (2) visually distinct types of vinyl floor tiles were observed in the surveyed area. A brief description of each of the floor tile is outlined below:

- VFT01 (Beige 12" x 12" vinyl floor tiles with Brown Fleck Pattern):

VFT 01 was observed to be present in K2E09 (Reception Area).

Three (3) representative samples (Sample Set S06A-C) of the blue vinyl floor tile were collected and analyzed for determination of asbestos content. Analysis of Sample Set S06 found that VFT01 does not contain asbestos.

The colourless mastic and the grey cementitious material associated with the vinyl floor tile samples were also found not to contain asbestos.

- VFT 02 (Rose 12" x 12" Floor Tile with Brown Flecks):

VFT 02 was observed to be present in Room K2E09 (Reception Area).

Three (3) representative samples (Sample Set S07A-C) of the rose vinyl floor tile were collected and analyzed for determination of asbestos content. Analysis of Sample Set S07 found the VFT02 does not contain asbestos. The yellow mastic material associated with the vinyl floor tile samples was also found not to contain asbestos.

4.1.7 Asbestos Cement Products "Transite" (Non-Friable)

No asbestos-cement products, commonly referred to as "Transite", were observed to be present in the surveyed area at the time of the assessment.

4.1.8 Drywall Joint Compound (DJC) (Potentially Friable)

No asbestos-containing drywall joint compound was identified within the surveyed area at the time of the assessment based on the samples collected.

Minor applications of interior drywall finishes were present in the form of wall and ceiling finishes within the surveyed area.

Seven (7) representative samples (Sample Set S04A-G) of drywall joint compound were collected and analyzed for determination of asbestos content. Analysis of Sample Set S04 found the joint compound material not to contain asbestos.

4.1.9 Plaster (Potentially Friable)

No asbestos-containing plaster finishes were identified within the surveyed area.

Smooth Plaster Finish:

Interior smooth plaster finishes were present in the form of wall finishes within of the surveyed areas.

Seven (7) representative samples (Sample Set S01A-G) of the smooth plaster were collected and analyzed for determination of asbestos content. Analysis of Sample Set S01 found that the top white smooth plaster layer material does not contain asbestos.

Grey scratch-coat plaster layer associated with white smooth plaster layer was also analyzed as part of the analysis process which confirmed that the material does not contain asbestos.

Rough Plaster Finish:

Rough plaster finishes were present in the form of wall finishes above the ceilings within of the surveyed areas.

Five (5) representative samples (Sample Set S02A-E) of the rough grey plaster were collected and analyzed for determination of asbestos content. Analysis of Sample Set S02 found that the plaster layer material does not contain asbestos.

4.1.10 Vermiculite (Friable)

No vermiculite insulation was observed to be present within the surveyed area at the time of the assessment. It should be noted that loose fill vermiculite insulation can often be present within voids of masonry and possibly some pre-manufactured surveyed area components that would not be identified during the course of this assessment.

4.2 Lead

Five (5) paint samples were collected for determination of lead content and submitted to EMSL for analysis during the assessment. The sample number refers to the Certificate of Analysis Report presented as Appendix II and summarised in Table 3 below. Sample results are colour coded to reflect the classification of lead content as presented in Table 4 - EACC Classification of Lead.

Table 3– Analysis Summary of Lead Samples			
Sample No.	Locations	Sample Description	Result (% wt)
LPB1	K2E04	Green Paint on Drywall Wall	<0.0064
LBP2	K2E02	Off-White Paint on Plaster Wall	0.065
LBP3	K2E08	Rose Paint on Plaster Wall	<0.0064
LBP4	K2E14	Orange Paint on Drywall Wall	<0.0064
LBP5	K3E	Yellow Paint on Drywall Wall	<0.0064

No regulations currently exist in Ontario defining the lower limit of lead-containing material. The Ontario Ministry of Labour (MOL) has issued a guideline for lead abatement, entitled Guideline – Lead on Construction Projects (2004) which is considered enforceable. The Guideline does not specify what constitutes a material as “lead-containing”. Instead, it outlines procedures based on the concentration of airborne lead encountered during removal, as well as provides procedures and/or specific operations for lead-containing material removal.

However, the Environmental Abatement Council of Canada (EACC) “*Lead Guideline for Construction, Renovation, Maintenance or Repair*” document classifies paint as either Low-Level, Lead-Containing, or Lead-Based as outlined in Table 4 below.

Table 4- EACC Classification of Lead	
Concentration of Lead	Definition
0.1% or less	“Low-Level Lead” (“Virtually Safe”)
Greater than 0.1% but less than 0.5%	“Lead-Containing”
Greater than 0.5%	“Lead-Based”

Based on these criteria and the results of the sample analysis, all of the paint finishes sampled are considered to be “Low-Level Lead” (“virtually safe”).

It should be noted that lead may also be present in wiring connectors, electric cable sheathing, emergency light batteries, solder joints on copper piping, ceramic glazes, and lead sheeting, where present at the Site.

4.3 Mercury

Mercury vapour is present in all fluorescent light tubes.

4.4 Silica

Free crystalline silica, present as common construction sand, is present in all concrete and masonry products where present in the Select areas surveyed.

4.5 Isocyanates

Free isocyanate compounds would not be expected to be found in a non-manufacturing facility.

4.6 Vinyl Chloride Monomer

Vinyl chloride monomer would not be expected to be found in a non-manufacturing facility.

4.7 Benzene

Benzene would not be expected to be found in a non-manufacturing facility.

4.8 Acrylonitrile

Acrylonitrile would not be expected to be found in a non-manufacturing facility.

4.9 Coke Oven Emissions

Coke oven emissions would not be expected to be found in a non-manufacturing facility.

4.10 Arsenic

Arsenic would not be expected to be found in a non-manufacturing facility.

4.11 Ethylene Oxide

Ethylene oxide would not be expected to be found in a non-manufacturing facility.

4.12 Mould

No visible mould growth was observed to be present within the surveyed area at the time of the assessment.

Water staining was observed on several of the ceiling tiles within various areas of the surveyed area.

It is possible that mould growth is present in concealed areas such as wall or ceiling cavities, pipe chases, etc. or in areas not currently assessed by Maple. The client should notify Maple should any water damage or suspect mould growth be discovered.

4.13 Polychlorinated Biphenyls (PCBs)

The fluorescent lamp fixtures observed contained T8 fluorescent light tubes. T8 fixtures have electronic ballast and are considered as not containing PCB.

5.0 RECOMMENDATIONS

5.1 Asbestos

Asbestos-containing materials identified within the surveyed areas include the following:

- Vinyl Sheet Flooring

General recommendations for each of the confirmed asbestos-containing materials are as follows:

- Removal or disturbance of asbestos-containing vinyl sheet flooring requires the use of either Type 2 or Type 3 Asbestos Abatement Procedures depending on the method of removal employed by the contractor.

It is important to note that due to the presence of solid wall and ceiling systems, the assessment was not able to confirm or deny the presence of ACM within wall and ceiling cavities. The presence of concealed ACM should be assumed as well as within rooms that were not accessible during the assessment. It is possible that ACM is present that was not identified in this report.

This report should not be read or interpreted as a "scope of work". Detailed abatement specifications should be prepared for asbestos removal that will impact the scope of any future renovations.

5.2 Lead

The paint finishes sampled were found to contain "Low-Level Lead" (0.1% or less). Low-Level Lead paints are considered "virtually safe" provided that:

- Airborne lead concentrations are kept below 0.05 mg/m³;
- General dust suppression and worker hygiene procedures are utilized; and
- Torching or other activities that create fumes are not completed.

It should be noted that appropriate lead abatement procedures are to be followed for the disturbance and disposal of lead-containing materials present in wiring connectors, electric cable sheathing, solder joints on copper piping, emergency light batteries, ceramic glazes, and lead sheeting, where present at the Site.

5.3 Mould

Remove and dispose of the water-stained ceiling tiles using EACC Level 1 Mould Remediation Procedures.

If previously unidentified mould growth is found within the wall cavities of the walls to be removed, Maple is to be contacted to assess the conditions and provide appropriate mould remediation procedures.

5.4 Mercury

Recycle and reclaim mercury from fluorescent light tubes when taken out of service. Do not break lamps or separate mercury vapour from components. Mercury vapour is classified as a hazardous waste and must be disposed of in accordance with local regulations.

5.5 Silica

Proper dust suppression techniques and other safety precautions to control possible generation of silica dust from the demolition of concrete and masonry products present in the building should follow those outlined in the Ministry of Labour Guideline- Silica on Construction Projects, 2004.

6.0 LIMITATIONS

Due to the nature of building construction some limitations exist as to the possible thoroughness of the subject investigation. The field observations are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. Maple warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the assessment.

It is possible that conditions may exist which could not be reasonably identified within the scope of the investigation or which were not apparent during the site investigation. Maple believes that the information collected during the investigation period concerning the property is reliable. No other warranties are implied or expressed.

Information provided by Maple is intended for Client use ONLY. Any use by a third party, of reports or documents authored by Maple, or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Maple accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted.

The liability of Maple or its staff will be limited to the lesser of the fees paid or actual damages incurred by the Client. Maple will not be responsible for any consequential or indirect damages. Maple will only be liable for damages resulting from negligence of Maple; all claims by the Client shall be deemed relinquished if not made within two years after last date of services provided.

Please contact Maple Environmental Inc. at (905) 257-4408 for inquiries regarding this project.

END OF REPORT

Sincerely,

MAPLE ENVIRONMENTAL INC.

Environment, Health and Safety Consultants

Prepared By:



Richards Reboks,
Senior Project Technologist

Reviewed By:



Kyle Prosser
Senior Project Manager

G:\Shared drives\Projects 22000 - 22999\22700 - 22799\22765 Sunnybrook, K2E K3E, Dsub\22765 SHSC, K2E-K3E DSUB REVISED.doc

APPENDIX I
LABORATORY ANALYSIS REPORT - ASBESTOS

Laboratory Analysis Report

To:

Richard Reboks
Maple Environmental Inc.
482 South Service Road East, Suite 116
Oakville, Ontario
L6J 2X6

EMC LAB REPORT NUMBER: A121709
Job/Project Name: SHSC, K2E & K3E
Analysis Method: Polarized Light Microscopy – EPA 600
Date Received: Jun 26/25 **Date Analyzed:** Jul 4/25
Analyst: John Paul Cantillon
Reviewed By: Malgorzata Sybydlo

No. of Phases Analyzed: 55
Job No: 22765
Number of Samples: 34
Date Reported: Jul 4/25

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S01A	A121709-1	Smooth plaster wall – K2E02	2 Phases: a) White, plaster b) Grey, plaster	ND			100
S01B	A121709-2	Smooth plaster wall – K2E08	2 Phases: a) White, plaster b) Grey, plaster	ND			100
S01C	A121709-3	Smooth plaster wall – K2E14	2 Phases: a) White, plaster b) Grey, plaster	ND			100
S01D	A121709-4	Smooth plaster wall – K2E25	2 Phases: a) White, plaster b) Grey, plaster	ND			100
S01E	A121709-5	Smooth plaster wall – K2E31	2 Phases: a) White, plaster b) Grey, plaster	ND			100
S01F	A121709-6	Smooth plaster wall – corridor	2 Phases: a) White, plaster b) Grey, plaster	ND			100
S01G	A121709-7	Smooth plaster wall – K3E	2 Phases: a) White, plaster b) Grey, plaster	ND			100
S02A	A121709-8	Rough plaster – K2E02	Grey, plaster	ND			100
S02B	A121709-9	Rough plaster – K2E08	Grey, plaster	ND			100

EMC LAB REPORT NUMBER: A121709

Client's Job/Project Name/No.: 22765

Analyst: John Paul Cantillon

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S02C	A121709-10	Rough plaster – K2E14	Grey, plaster	ND			100
S02D	A121709-11	Rough plaster – K2E25	Grey, plaster	ND			100
S02E	A121709-12	Rough plaster – K2E31	Grey, plaster	ND			100
S03A	A121709-13	VSF01 – grey flooring with white and black K2E02	2 Phases: a) Light grey, vinyl flooring b) Yellow, mastic	ND ND			100 100
S03B	A121709-14	VSF01 – grey floor – K2E12	2 Phases: a) Light grey, vinyl flooring b) Yellow, mastic	ND ND			100 100
S03C	A121709-15	VSF01 – grey floor – K2E25	2 Phases: a) Light grey, vinyl flooring b) Yellow, mastic	ND ND			100 100
S04A	A121709-16	DJC – K2E02 ceiling	White, joint compound	ND			100
S04B	A121709-17	DJC – K2E09 ceiling	White, joint compound	ND			100
S04C	A121709-18	DJC – K2E14 ceiling	White, joint compound	ND			100
S04D	A121709-19	DJC – K2E25 ceiling	White, joint compound	ND			100
S04E	A121709-20	DJC – K2E30 ceiling	White, joint compound	ND			100
S04F	A121709-21	DJC – K2E corridor wall	White, joint compound	ND			100
S04G	A121709-22	DJC – K3E corridor wall	White, joint compound	ND			100
S05A	A121709-23	VSF02 – tan flooring in K2E05	2 Phases:				

EMC LAB REPORT NUMBER: A121709

Client's Job/Project Name/No.: 22765

Analyst: John Paul Cantillon

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
			a) Off white, vinyl flooring b) Grey, vinyl backing	ND Chrysotile	60		100 40
S05B	A121709-24	VSF02 – tan flooring in corridor by K2E29	NA	NA			
S05C	A121709-25	VSF02 – tan flooring in corridor by K2E25	NA	NA			
S06A	A121709-26	VFT01 – beige 12"x12" – K2E09	3 Phases: a) Light pink, vinyl floor tile b) Colourless, mastic c) Grey, cementitious material	ND ND ND			100 100 100
S06B	A121709-27	VFT01 – beige 12"x12" – K2E09	3 Phases: a) Light pink, vinyl floor tile b) Colourless, mastic c) Grey, cementitious material	ND ND ND			100 100 100
S06C	A121709-28 ⁶	VFT01 – beige 12"x12" – K2E09	3 Phases: a) Light pink, vinyl floor tile b) Colourless, mastic c) Grey, cementitious material	ND ND ND			100 100 100
S07A	A121709-29	VFT02 – rose 12"x12" – K2E09	2 Phases: a) Pink, vinyl floor tile b) Yellow, mastic	ND ND			100 100
S07B	A121709-30	VFT02 – rose 12"x12" – K2E09	2 Phases: a) Pink, vinyl floor tile b) Yellow, mastic	ND ND			100 100
S07C	A121709-31	VFT02 – rose 12"x12" – K2E09	2 Phases: a) Pink, vinyl floor tile	ND			100

EMC LAB REPORT NUMBER: A121709

Client's Job/Project Name/No.: 22765

Analyst: John Paul Cantillon

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
			b) Yellow, mastic	ND			100
S08A	A121709-32	VSF02 – orange flooring – K3E02	2 Phases: a) Brown, vinyl flooring b) Black, mastic	ND ND			100 100
0S08B	A121709-33	VSF02 – orange flooring – K3E02	2 Phases: a) Brown, vinyl flooring b) Black, mastic	ND ND			100 100
S08C	A121709-34	VSF02 – orange flooring – K3E02	2 Phases: a) Brown, vinyl flooring b) Black, mastic	ND ND			100 100

Note:

1. Bulk samples are analyzed using Polarized Light Microscopy (PLM) and dispersion staining techniques. The analytical procedures are in accordance with EPA 600/R-93/116 method.
2. The results are only related to the samples analyzed. **ND** = None Detected (no asbestos fibres were observed), **NA** = Not Analyzed (analysis stopped due to a previous positive result).
3. This report may not be reproduced, except in full without the written approval of EMC Scientific Inc. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.
4. The Ontario Regulatory Threshold for asbestos is 0.5%. The limit of quantification (LOQ) is 0.5%.
5. Vinyl floor tiles may contain very fine asbestos fibres which the PLM method cannot detect. TEM analysis may be necessary to confirm the absence of asbestos.
6. Phase c) is small in size.

APPENDIX II

LABORATORY ANALYSIS REPORT – LEAD

**EMSL Canada Inc.**

2756 Slough Street, Mississauga, ON L4T 1G3

Phone/Fax: (289) 997-4602 / (289) 997-4607

<http://www.EMSL.com>torontolab@emsl.com

EMSL Canada Or 552511433

CustomerID: 55MAPL78

CustomerPO: 22765

ProjectID:

Attn: **Richards Reboks**
Maple Environmental, Inc.
482 South Service Road East
Suite 116
Oakville, ON L6J 2X6

Phone: (905) 257-4408
Fax: (905) 257-8865
Received: 6/26/2025 03:05 PM
Collected: 6/19/2025

Project: **22765 SHSC K2E/ K3E****Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)***

<i>Client SampleDescription</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Weight</i>	<i>RDL</i>	<i>Lead Concentration</i>
LBP1 552511433-0001	6/19/2025 Site: Green -K2E04	6/27/2025	0.2579 g	0.0064 % wt	<0.0064 % wt
LBP2 552511433-0002	6/19/2025 Site: Off White - K2E02	6/27/2025	0.2573 g	0.0064 % wt	0.065 % wt
LBP3 552511433-0003	6/19/2025 Site: Rose - K2E08	6/27/2025	0.2546 g	0.0064 % wt	<0.0064 % wt
LBP4 552511433-0004	6/19/2025 Site: Orange - K2E14	6/27/2025	0.2513 g	0.0064 % wt	<0.0064 % wt
LBP5 552511433-0005	6/19/2025 Site: Yellow- K3E	6/27/2025	0.2525 g	0.0064 % wt	<0.0064 % wt

Rowena Fanto, Lead Supervisor
or other approved signatory

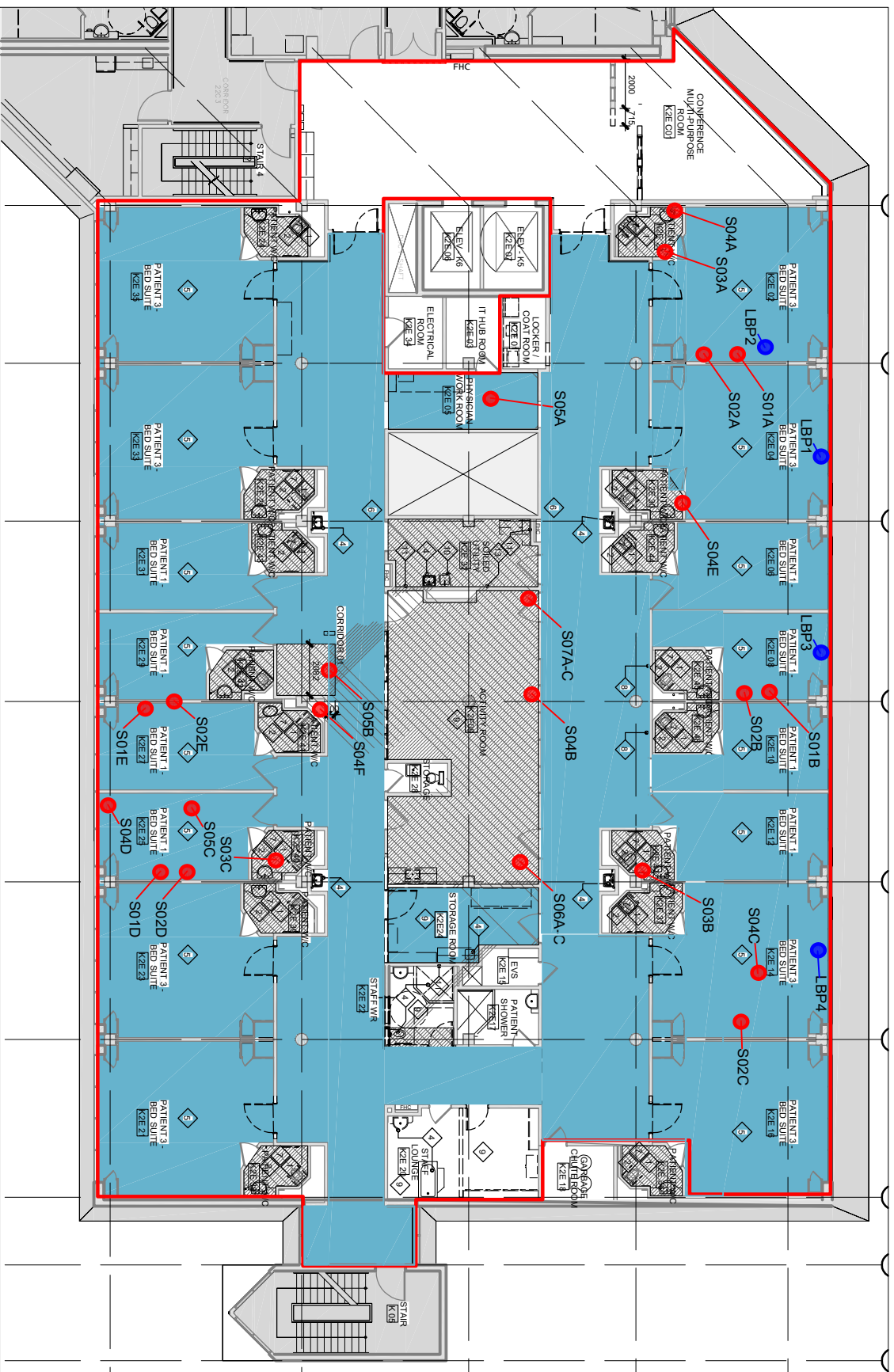
EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. * Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.0064% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

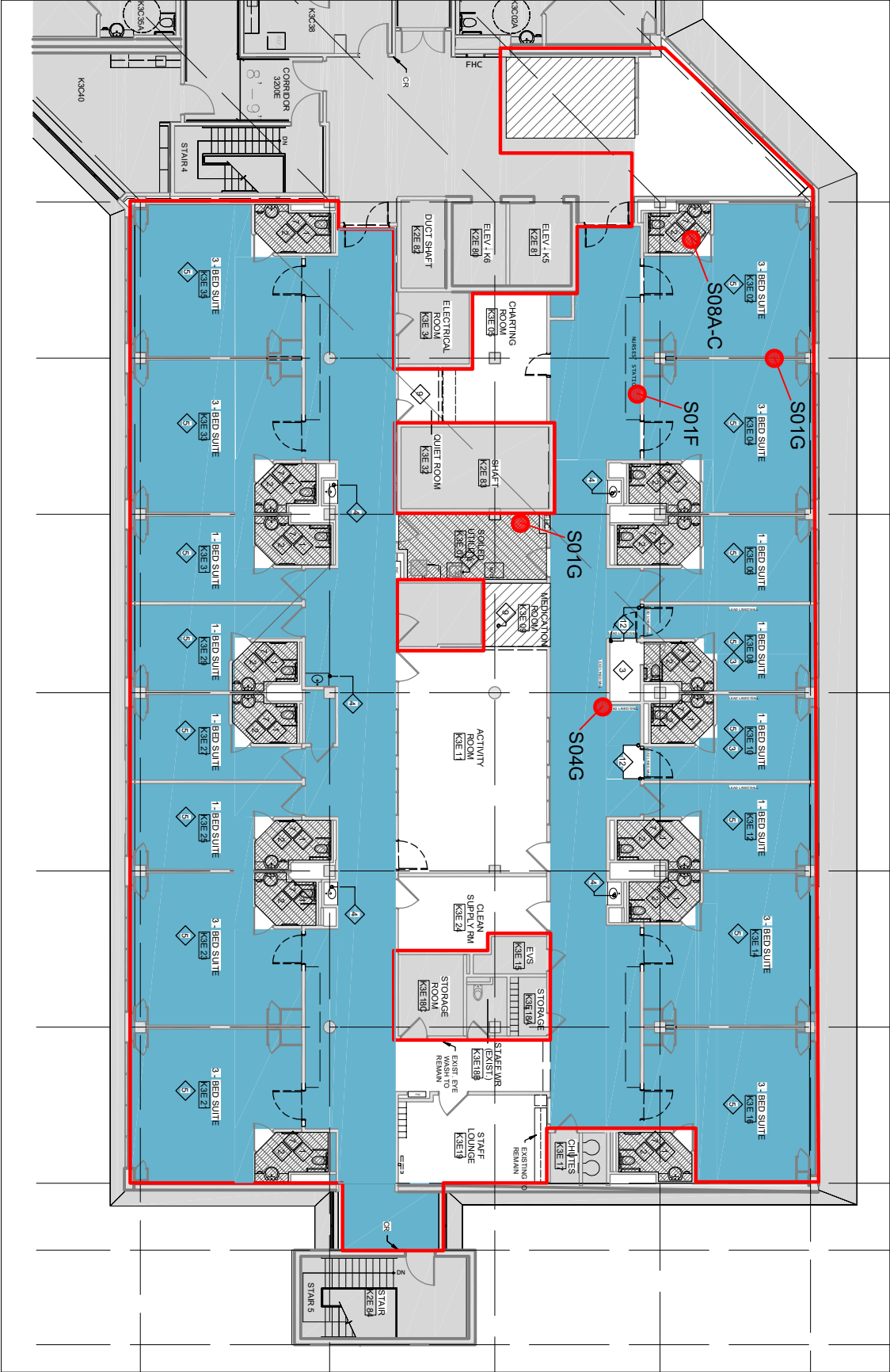
Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA LAP, LLC-ELLAP Accredited #196142














Initial report from 06/30/2025 08:49:13

APPENDIX III

DRAWINGS





<div><div>MAPLE ENVIRONMENTAL INC. ENVIRONMENTAL HEALTH & SAFETY CONSULTANTS 482 South Service Rd. E., Suite 116 Oakville - Ontario - L6L 2V6 Tel: (905) 257 4408 - Fax: (905) 257 8865 www.MapleEnvironmental.com</div></div>		PROJECT NO.: 22765		<table><tr><th>SYMBOL</th><th>DESCRIPTION</th></tr><tr><td></td><td>ASBESTOS BULK SAMPLE: S-##</td></tr><tr><td></td><td>LEAD BULK SAMPLE: LB-##</td></tr></table>		SYMBOL	DESCRIPTION		ASBESTOS BULK SAMPLE: S-##		LEAD BULK SAMPLE: LB-##	<table><tr><th>SYMBOL</th><th>DESCRIPTION</th></tr><tr><td></td><td>VINYL SHEET FLOORING</td></tr><tr><td></td><td>SURVEYED AREA</td></tr></table>		SYMBOL	DESCRIPTION		VINYL SHEET FLOORING		SURVEYED AREA	Limited Designated Substance Survey Sunnybrook Health Sciences Centre 2075 Bayview Ave, North York, ON K2E & K3E Renovations Third Floor Plan Floor Plan		<table><tr><th>SCALE</th></tr><tr><td>NTS</td></tr><tr><th>SHEET</th></tr><tr><td>DS-02</td></tr></table> <div>DATE: July, 2025</div>		SCALE	NTS	SHEET	DS-02
SYMBOL	DESCRIPTION																										
	ASBESTOS BULK SAMPLE: S-##																										
	LEAD BULK SAMPLE: LB-##																										
SYMBOL	DESCRIPTION																										
	VINYL SHEET FLOORING																										
	SURVEYED AREA																										
SCALE																											
NTS																											
SHEET																											
DS-02																											
DRAWN BY: D. SEUJATTAN		CHECKED BY: R. REBOKS																									

Room Shielding Calculations:													
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
A	Patient room# K3E 06	I-131	9250	5.47E-05	1	24	12.14562	1.5	3	1	2.02427	0.585231428	0.585
													Required Lead (mm)
													6.35
											Total Unshielded dose(mSv/wk)	Total shielded Dose (mSv/wk)	
											2.024	5.85231E-01	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
B	Outside	I-131	9250	5.47E-05	1	24	12.14562	1.5	3	0	0	0	0.000
													required Lead (mm)
													0
											Total Unshielded dose(mSv/wk)	Total shielded Dose (mSv/wk)	
											0.000	0.00000E+00	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
C	Patient room# K3E 10	I-131	9250	5.47E-05	1	24	12.14562	1.5	1	1	18.21843	0.701140519	0.701
													required Lead (mm)
													19.05
											Total Unshielded dose(mSv/wk)	Total shielded Dose (mSv/wk)	
											18.218	7.01141E-01	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
D	Corridor/ Second shower	I-131	9250	5.47E-05	1	8	4.04854	1.5	5	0.2	0.04858248	0.014045554	0.337
													required Lead (mm)
													6.35
											Total Unshielded dose(mSv/wk)	Total shielded Dose (mSv/wk)	
											0.049	1.40456E-02	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
E	Corridor Door	I-131	9250	5.47E-05	1	8	4.04854	1.5	6	0.125	0.021086146	0.015867106	0.381
													required Lead (mm)
													1.6
											Total Unshielded dose(mSv/wk)	Total shielded Dose (mSv/wk)	
											0.021	1.58671E-02	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
Floor	Internal Medicine	I-131	9250	5.47E-05	1	8	4.04854	1.5	5	1	0.2429124	0.023070745	0.554
													Existing Concrete (mm)
													229
											Total Unshielded dose (mSv/wk)	Total shielded Dose (mSv/wk)	
											0.243	2.30707E-02	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
Ceiling	Roof / No occupancy	I-131	9250	5.47E-05	1	8	4.04854	1.5	5	0	0	0	0.000
													Existing Concrete (mm)
													229
											Total Unshielded dose (mSv/wk)	Total shielded Dose (mSv/wk)	
											0.000	0.00000E+00	

Room Shielding Calculations:													
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
A	Patient room# K3E 12	I-131	9250	5.47E-05	1	24	12.14562	1.5	3	1	2.02427	0.585231428	0.585
													Required Lead (mm)
													6.35
											Total Unshielded dose(mSv/wk)	Total shielded Dose (mSv/wk)	
											2.024	5.85231E-01	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
B	Outside	I-131	9250	5.47E-05	1	24	12.14562	1.5	3	0	0	0	0.000
													required Lead (mm)
													0
											Total Unshielded dose(mSv/wk)	Total shielded Dose (mSv/wk)	
											0.000	0.00000E+00	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
C	Patient room# K3E 08	I-131	9250	5.47E-05	1	24	12.14562	1.5	1	1	18.21843	0.701140519	0.701
													required Lead (mm)
													19.05
											Total Unshielded dose(mSv/wk)	Total shielded Dose (mSv/wk)	
											18.218	7.01141E-01	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
D	Corridor	I-131	9250	5.47E-05	1	8	4.04854	1.5	5	0.2	0.04858248	0.014045554	0.337
													required Lead (mm)
													6.35
											Total Unshielded dose(mSv/wk)	Total shielded Dose (mSv/wk)	
											0.049	1.40456E-02	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
E	Corridor Door	I-131	9250	5.47E-05	1	8	4.04854	1.5	6	0.125	0.021086146	0.015867106	0.381
													required Lead (mm)
													1.6
											Total Unshielded dose(mSv/wk)	Total shielded Dose (mSv/wk)	
											0.021	1.58671E-02	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
Floor	Internal Medicine	I-131	9250	5.47E-05	1	8	4.04854	1.5	5	1	0.2429124	0.023070745	0.554
													Existing Concrete (mm)
													229
											Total Unshielded dose (mSv/wk)	Total shielded Dose (mSv/wk)	
											0.243	2.30707E-02	
Location	Wall	Source	A (MBq)	Specific Activity	# Patient per day	Time per patient (h)	mSv /patient @ 1m	Days/wk	D (m)	T	Unshielded Dose (mSv/wk)	Shielded Dose (mSv/wk)	Non-NEWs Dose/y (mSv)
Ceiling	Roof / No occupancy	I-131	9250	5.47E-05	1	8	4.04854	1.5	5	0	0	0	0.000
													Existing Concrete (mm)
													229
											Total Unshielded dose (mSv/wk)	Total shielded Dose (mSv/wk)	
											0.000	0.00000E+00	