



Hazards	Repetitive strain, respiratory, falls
Tools/Equipment	HEPA vacuum, ladder
Employee Group(s)	Custodial

Required PPE:



**Safety
Shoes**



**Eye
Protection**



Gloves



Respirator

The following is a mould remediation plan within the Angus L. MacDonald Library, St. FX University, that was prepared by ALLTECH Environmental in September 2022. The remediation plan will follow procedures outlined in the Canadian Construction Association (CCA 82-2018) “Mould Guidelines for the Canadian Construction Industry” and the ANSI/IICRC S520-2015 “Standard for Professional Mould Remediation”, 3rd edition.

The conditions observed in the Angus L. MacDonald Library were:

- Minor surface mould growth on numerous books throughout the library. Mould growth on the books normally appears as a pattern of greenish/grey spotty circular growth with masses of fine, white, fluffy growth. ALL-TECH observed the mould growth feeding on the microscopic layer of organic dust on the books and can be easily cleaned.
- A layer of settled dust among the book stacks throughout the library.

Table 1 – Recommendations for Remediation

Location	Remediation Required
Numerous books located through the library and stack shelving	Books – HEPA vacuum all surfaces of the books on each stack and wipe visual mould impacted books with an alcohol based disinfectant wipe. Stack Shelving – HEPA vacuum all surfaces of the stack.
Rare Books	Books – Follow the Library procedures for handling rare books and HEPA vacuum only , do not use any wet wiping to clean. If further remediation of mould-contaminated rare books, further assessment must be completed to determine the best method to restore.
Floors	Carpet/Hard Surfaces – HEPA vacuum and wash surfaces following normal cleaning procedures.
Ceiling Tiles by 3 rd Floor Vent	Ceiling Tile – Remove and replace with new.

NOTE: All PPE, tools and equipment shall be used in accordance with provincial OH&S legislation, manufacturer’s specifications, applicable standards and codes of practice.



SCOPE OF WORK

Work Area Preparation

- 1 Isolate with caution tape to prevent bystanders from entering the designated work area.
- 2 Clean materials listed in Table 1 in place.

Worker Protection

- Workers must wear an N95 respirator. The selection, fitting, maintenance, and use of the respirator must meet the requirements of the CSA Standard Z94.4-2018, as amended. Workers must be fit tested with the assigned respirator within the past 2 years. The seal of the respirator to the wearer's face shall not be comprised by any facial hair. Filters shall be disposed and replaced after 24 hours of continuous use.

Execution

- 1 Conduct all cleaning tasks as identified in Table 1 starting on the top floor of the library and working down each level to the basement.
- 2 Begin by cleaning with a HEPA vacuum with soft brush starting at the top of the stack and working down each stack shelf and surfaces of all books. Do not use a non-HEPA vacuum. Clean all exposed surfaces with the HEPA Vacuum and brush attachment.
- 3 Wet wiping any books with visible mould growth, using the alcohol based disinfectant wipe. Wipe both adjacent books next to the mould book and replace on stack.
- 4 For Rare Books, handle books as per Library's procedures and HEPA vacuum only.
- 5 Remove and replace ceiling tiles around the vent on the 3rd Level by Stack 307.

Scheduling

- Coordinate with the Library regarding work schedule and isolate an entire wing of the floor using caution tape starting with the top level working down to the basement. **Do not start another level below, until the entire level is clean.**

Clearance Sampling

Upon completion of cleaning of the surfaces in the library listed in Table 1, a competent person must inspect the work area for acceptable cleanliness and completion, by a careful visual inspection for surface dust and visible mould growth. Surface mould testing of representative surfaces are recommended, but not required. Surface clearance criteria includes surface sampling for mould. A site will be considered acceptable and clean when a thorough visual inspection shows that all work as per plan is completed and that all surfaces in the work areas are free of any surface dust or debris. If surface sampling is performed to confirm cleanliness, the following criteria will be used to determine if re-cleaning of the work area is required.



Clearance Parameter	Result	Required Action
Visual inspection	Dust free and no visible mould growth	No further action required.
Visual inspection	Dust and/or visible mould growth present	Re-cleaning is required.
Surface Mould Testing Results	Mould spores present, but no growth, or sparse growth indicated.	No further action is required.
Surface Mould Testing Results	Sparse to moderate growth Moderate growth Abundant growth	Re-cleaning is required.

Limitations

It should be recognized that every effort has been made to identify all areas of the building requiring remediation. During the clean-up, areas of unidentified growth may be uncovered. Therefore, the remediation plan should be considered a living document that may require modification to reflect conditions observed. Any change to the remediation plan would require an approval by all parties involved.